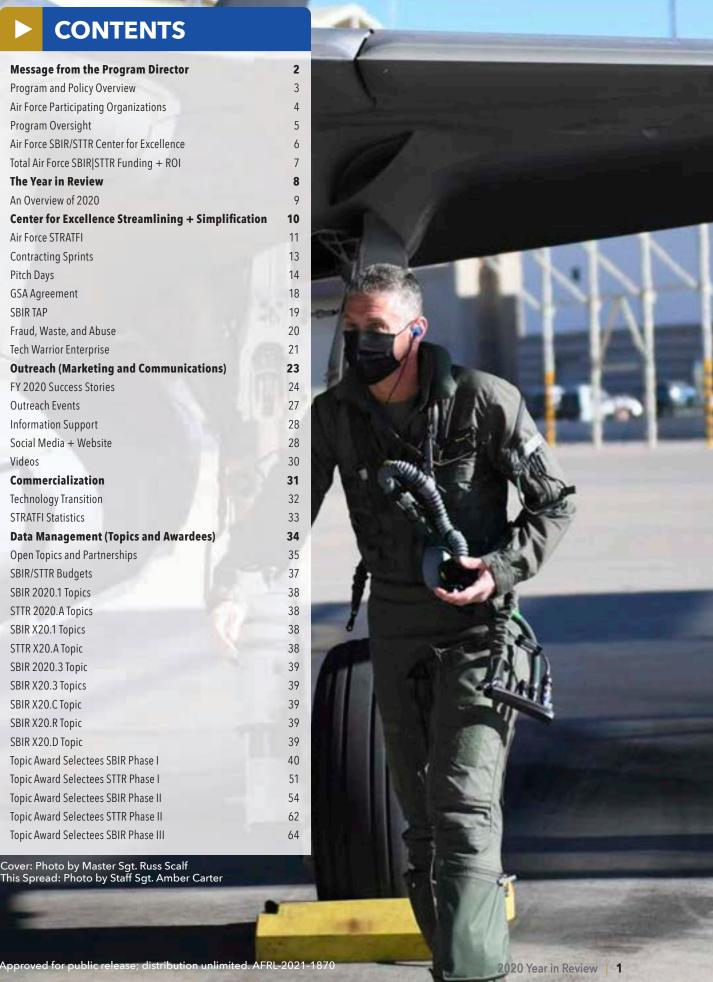


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MESSAGE FROM THE PROGRAM DIRECTOR



The Air Force Small Business Innovation Research/ Small Business Technology Transfer Program posted extraordinary results in fiscal year 2020. In the midst of a global pandemic, the program's crucial metrics remained on an upward trajectory even as the organization supported the Air Force and the Defense Department in the fight against the COVID-19 virus.

Air Force SBIR/STTR achieved its success in part by staying focused on its core mission of serving the technology needs of the warfighter. In FY2020, that included evaluating and funding technology that could be used against the virus. At the same time, SBIR/ STTR's Phase III portfolio experienced unprecedented success, with our small business partners recording more than \$2.8 billion in non-SBIR gains, compared with \$1.1 billion in FY2019.

In FY2020, SBIR received 4,788 funding proposals from small businesses. Of those, it awarded 1,436 SBIR Phase I and II contracts, totaling \$785.3 million. The STTR program received 405 proposals and awarded 255 Phase I and II contracts, totaling \$66.2 million.

In the midst of this growth, SBIR/STTR continued its shift to working under AFWERX and away from the Air Force Research Laboratory's Small Business Office. SBIR topics issued last year focused on key areas of interest such as simulators, digital engineering, rapid sustainment and quantum technologies. The SBIR program also supported the Air Force in its first Virtual Pitch Bowl and Spark Collider event, held in March 2020, where officials introduced the STRATFI (Strategic Funding Increase) concept. Air Force SBIR/STTR, in tandem with our strategic partners, also offered small businesses and developers in the cyber operations and medical/tactical spaces the opportunity to virtually demonstrate innovative technology to military officials and receive real-time feedback from experts.

We are thrilled with FY2020's results and anxious to continue supporting our Air Force and Space Force customers so our nation's warfighters have the groundbreaking, mission-critical technology they need. We remain committed to our efforts to expand the economy by supporting small technology businesses and promoting investment in the nation's defense industrial base.

PROGRAM AND POLICY OVERVIEW

The primary goal of the Air Force SBIR/STTR Program is to serve the technology needs of the Air Force warfighter. The program is part of the Air Force's technology development efforts to develop and provide advanced, affordable, and integrated solutions that enable our Air Force's ability to remain strong and innovative with the best available technologies. Congress designed the SBIR program, which is executed in a phased approach with hundreds of small R&D contracts.

Air Force SBIR/STTR is set up to address barriers that exist in the traditional Air Force acquisitions process. FY2020 saw refinement in an Open Topics solicitations process, which allowed for more technologies to be brought to the attention of the Air Force and generated exponentially more proposals and awards than in previous years.

Several military program offices and centers set Air Force SBIR/STTR areas of concern, which provides key user inputs into the focus area of our open solicitations.

Beginning in March of FY2020, Air Force SBIR/ STTR faced unprecedented challenges. The outbreak of Covid-19 made the live outreach events of previous years impossible, and the many workers who make the program possible could no longer show up to the office in person. However, with the spirit of innovation and ingenuity, continued efforts toward outreach and development of the program. The men and women of the program continued working hard from the health and safety of their home, rather than at the office.

Despite the setbacks, the Air Force SBIR/STTR program continued to innovate. Instead of hosting live events in cities across the country, the program hosted numerous virtual events, including Virtual Pitch Days and Collider events. The Air Force hosted its first Pitch Bowl.

An agreement with the General Services Administrations generated a number of contracts with participating companies, and improved Air Force capabilities.

To accomplish its mission, the Air Force SBIR/ STTR program responsibilities are: Establishing the Air Force's solicitation program to meet the DoD schedule; Managing and allocating funds; Creating and maintaining the Air Force SBIR/STTR database; Coordinating outreach and marketing efforts nationwide; and Responding to small business inquiries.

In May 2019, the Small Business Administration (SBA) released an updated SBIR policy directive. This policy guides our efforts, as does the statutory purpose set forth by Congress.

It is important to note that SBIR policies have not been established by the Department of Defense or the U.S. Air Force. In lieu of policies from DoD or USAF, the Air Force SBIR/STTR program follows the policy provided by SBA and by the statutory requirements established by Congress.

The policy directive provided by the SBA can be found at: https://www.sbir.gov/about/about-sbir#sbirpolicydirective.

The federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are similar. However, STTR programs require small businesses to formally collaborate with not-forprofit research institutions, such as universities, and are much smaller in size, reflecting a smaller percentage of federal budget allocation.

For Fiscal Year 2020, the three phases are:

- PHASE I Funds short-term feasibility studies of proposed innovations; can be up to \$225,000+.
- PHASE II Funds successful Phase I projects; frequently results in development of a prototype; caps at between \$1 or \$1.5 million cap; typically for a two-year R&D effort.
- PHASE III Funds work that derives from, extends, or completes an effort made under prior SBIR/STTR funding agreements; funded by sources other than SBIR/STTR; includes any follow-on, non-SBIR/STTR funding for further specialized R&D or transition of technologies to government acquisition programs. 🧐

PHASE I

Feasibility study

Up to \$225K+

PHASE II

- Full R&D effort
- \$1M or \$1.5M cap and two-year R&D effort

PHASE III

- Final development/production
- External non-SBIR funding

AIR FORCE PARTICIPATING ORGANIZATIONS



CALIFORNIA

1. Edwards AFB

Air Force Research Laboratory Air Force Flight Test Center

2. Los Angeles AFB

Space and Missile Systems Center

HAWAII

3. Maui

Air Force Research Laboratory

NEVADA

4. AFWERX

UTAH

5. Hill AFB

Air Force Sustainment Center

NEW MEXICO

6. Kirtland AFB

Air Force Research Laboratory Air Force Nuclear Weapons Center

OKLAHOMA

7. Tinker AFB

Air Force Sustainment Center

TEXAS

8. Lackland AFB

Air Force Surgeon General Air Force Civil Engineer Center

9. AFWERX

OHIO

10. Wright-Patterson AFB

Air Force Research Laboratory Air Force Life Cycle Management Center

TENNESSEE

11. Arnold AFB

Air Force Test Center

FLORIDA

12. Hurlburt Field

Air Force Special Operations Command

13. Eglin AFB

Air Force Research Laboratory Air Force Life Cycle Management Center Air Force Test Center

NEW YORK

14. Rome

Air Force Research Laboratory

MASSACHUSETTS

15. Hanscom AFB

Air Force Life Cycle Management Center

VIRGINIA

16. Arlington

Air Force Research Laboratory F-35 Joint Strike Fighter

WASHINGTON D.C.

17. AFWERX

18. MD5

GEORGIA

19. Robins AFB

Air Force Sustainment Center



PROGRAM OVERSIGHT (2020)

SMALL BUSINESS ADMINISTRATION (SBA) is the assigned Federal administration responsible for the SBIR|STTR programs. The SBA develops and issues the SBIR and STTR policy directives, setting forth policy for the general conduct of the programs within the Federal Government.

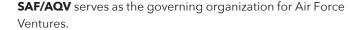


DOD OFFICE OF SMALL BUSINESS PROGRAMS (OSBP) is responsible for the overall management of the DoD SBIRISTTR Programs. The DoD SBIR|STTR Program Office is responsible for interfacing with the services, defense agencies, SBA, and Congress regarding SBIR|STTR.



SAF/AQ appoints the AFRL commander as the Technology Executive Officer (TEO) and serves as the Air Force focal point for scientific and engineering integrity for the Secretary of the Air Force and Chief of Staff of the Air Force.

SAF/AQR serves as the Air Force Science & Technology (S&T) Executive to represent, advocate, and defend the Air Force S&T Program to the Office of the Secretary of Defense (OSD), the other services, and Congress. It also serves as the SAF/AQ primary interface to the TEO.



SAF/SB monitors the Air Force SBIR|STTR Program and leverages program results and relevant technologies developed by small businesses, to meet prime and subcontracting goals, when appropriate.



AIR FORCE SBIR/STTR CENTER OF EXCELLENCE

FY2020 LEADERSHIP

MATT HOWARD (ACTING) DIRECTOR

Directs research budget of more than \$800 million focused toward qualified small businesses in the nation's high-tech arena. Through a competitive awards-based program, he manages nearly 1,000 contract efforts sponsored by more than 50 Air Force organizations from across the nation. He also enables small businesses to explore their technological potential and provides the incentive to profit from commercializing their technology.

KIM YODER | CONTRACTING CHIEF

Works closely with the contracting team to ensure that all contracting time and quality requirements are met, including contract management, proposal oversight and various other initiatives that help the program run smoothly.

SARAH FRENCH | CHIEF FINANCIAL OFFICER

Manages the financial actions of the Air Force SBIR/STTR program, including financial reporting, planning and analyzing program resources and assets.

JAMES SWEENEY III | CHIEF COMMUNICATIONS OFFICER

Responsible for managing and ensuring that a consistent, clear message is conveyed, publically and internally, through various digital and print communications channels. These include, but are not limited to, videos, graphics, websites, social media, events, published materials, newsletters, and all outward and inward facing branded messaging.

KELLEY KIERNAN | CHIEF TECHNOLOGY OFFICER

Responsible for analyzing and facilitating new technologies to aid DAF technology discovery, innovation, and transition. Leads communication around DAF cybersecurity and data safeguarding processes for small businesses working with the Air Force SBIR/STTR program. Fosters a culture of rapid experimentation and transition to the warfighter.

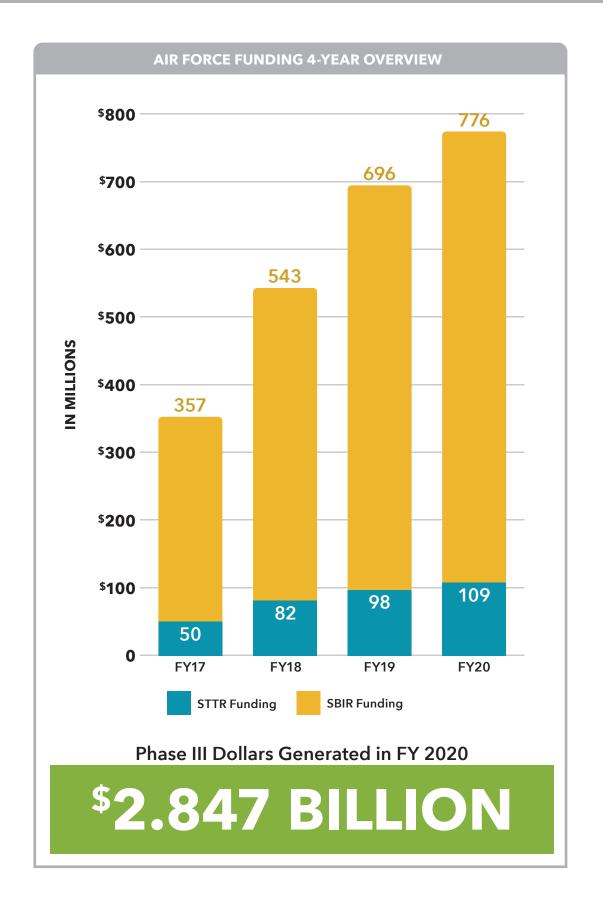
RON CLYBURN | INFRASTRUCTURE LEAD

Primary responsibilities include management of multiple information technology services, business process automation, data management and reporting services to maintain a state-of-the-art infrastructure and services that reduces cyber threats, maintains program efficiency and reduces operational costs.

DARRYL STIMSON | BUSINESS OPERATIONS LEAD

Responsibilities include process improvements and documentation, financial strategy and planning, and facilitating the daily operation of the SBIR/STTR processes.

TOTAL AIR FORCE SBIR/STTR **FUNDING + ROI**







The Air Force program operates on a congressionally mandated percentage of the Air Force's extramural Research/Research & Development (R/R&D) budget as established by the Small Business Innovation Research and Small Business Technology Transfer (SBIR and STTR) policy directives. This amounted to roughly \$885M for FY 2020.

The Air Force received 4,788 proposals for 17 SBIR topics in FY 2020 (SBIR 2020.1, 2020.2 and 2020.3).

In FY 2020, 819 Phase I and 617 Phase II contracts were awarded.

The Air Force received 405 proposals for 6 STTR topics in FY 2020 (STTR 2019.A, 2019.B, 2019.C). In FY 2020, 153 Phase I and 102 Phase II contracts were awarded.

AN OVERVIEW OF 2020

The Air Force SBIR/STTR Program continued to streamline acquisition processes in Fiscal Year 2020. The program refined its approach to topics solicitation, creating a small-business-friendly environment that encourages innovative thinking and puts the best possible technologies into the hands of warfighters.

The Pitch Day concept, introduced in 2019, was expanded to include the inaugural Pitch Bowl which was the culmination of previous Pitch Days focusing on the best of the best technologies. The Air Force continued to build on the Contracting Sprint concept, successfully executing large volumes of contract awards. Program activities continued at a robust pace, but supporting events that would normally bring industry and Air Force personnel together in one location were forced to a virtual format due to travel restrictions and social distancing mandates. Beginning in March, all in-person events pivoted to virtual. The inaugural Pitch Bowl, scheduled to coincide with South by Southwest in Austin, Texas, was the first event to be converted to an all-virtual event.

Fiscal Year 2020 saw a continued commitment to small businesses attempting to bring innovative solutions to bear on Air Force concerns. The Air Force SBIR/STTR Program provided numerous resources to the small business ecosystem to enhance their experience, improve their product offerings, and assist them while they navigate the solicitation and proposal process. The SBIR Technology Accelerator Project (TAP) program expanded to include six cohorts, and Tech Warrior Enterprise provided numerous opportunities for small businesses to have the technologies tested by field experts in simulated environments. Additionally, a percentage of funds were directed toward increasing participation by small disadvantaged businesses, women-owned

small businesses, veteran-owned businesses, and small businesses in states currently considered "underserved" by the Small Business Administration (SBA) in terms of SBIR contract awards.

The Air Force continued to use these funds in FY 2020 for the following purposes:

- Outreach
- Streamlining and simplifying processes
- Reporting (administrative, congressional, and interagency)
- Commercialization
- Prevention and detection of fraud, waste, and abuse
- Administration and implementation of the SBIR policy directive

The Air Force's plan for the SBIR Administration Pilot funding include the following:

- Increasing emphasis on detecting and preventing fraud, waste, and abuse in SBIR/STTR contracts
- Supporting technology demonstrations (Tech Warrior)
- Commercializing intellectual property
- Improving manufacturing technology
- Modernizing the Air Force SBIR/STTR program's information technology infrastructure
- Increasing marketing and outreach efforts to underserved communities.

STREAMLINING + SIMPLIFICATION



The Air Force Small Business Innovation Research / Small Business Technology Transfer Center for Excellence initiated or continued several strategies to streamline acquisition processes. These improvements get innovative technologies in the hands of warfighters faster and more efficiently. This simplified approach to acquisitions is designed to encourage participation by small businesses who may have considered federal contracts too cumbersome and costly in the past. These processes make it easier to work with the U.S. Air Force, providing technology for the warfighter, and supporting small businesses and the U.S. economy and industrial base. Most importantly, it ensures the retention of the most innovative technologies and those who create them.

Photo by Master Sgt. Russ Scalf



AIR FORCE **STRATFI**

AFWERX, in collaboration with the Air Force Small Business Innovation Research/ Small Business Technology Transfer Program, launched the STRATFI competitive funding initiative in Fiscal Year 2020.



Dubbed Strategic Funding Increase (STRATFI), this program awards funding to small businesses for technologies previously contracted and funded through an Air Force SBIR Phase II.

STRATFI can be applied not only to defense-specific technology, but also technology with military and commercial uses.

The funding mix varies. Defense-specific technology can be funded with SBIR money and other government funds. Dual-use technology financing, on the other hand, draws on a mix of SBIR cash combined with government funds and/or private-investor capital.

The programs' purpose is to catalyze relationships between Air Force and Space Force end-users and acquisitions professionals, private-sector innovators, and investors. This program also bridges the capability gap between current SBIR/STTR Phase II efforts and Phase III scaling efforts, facilitating delivery of strategic capabilities for the Department of the Air Force.

PROGRAM MATCHES SBIR, PRIVATE FUNDS

Through STRATFI, small businesses can receive between \$3 million and \$15 million in SBIR Phase IIB funds with a four-year performance period. Award sizes depend on waiver approvals from the Small Business Administration.

Under STRATFI, Department of Air Force funds are combined with cash from private sources such as venture capital firms and "angel" investors. Companies would receive matching funding of either a.) \$2 in private investment for every \$1 in SBIR funds, or b.) \$2 dollars from non-SBIR government customers for every \$1 in SBIR funding.

An applicant must meet several eligibility criteria. This includes either having an active Air Force SBIR/ STTR project in Phase II or having completed one within the last three years. The subject also must not already have been awarded a Sequential Phase II contract and must meet minimum matching investment requirements.

STRATFI LAUNCHED IN MARCH 2020

Air Force officials unveiled STRATFI in March 2020 during the inaugural Pitch Bowl/Spark Collider event as part of AFVentures, one of AFWERX'S three branches.

In March 2020, officials announced a combined award of nearly \$1 billion in contracts to more than 550 small businesses. This included roughly 20 SBIR Phase II companies identified as potential STRATFI recipients who, combined, could receive more than \$500 million in financing.

As of January 2021, officials had awarded STRATFI contracts to 18 firms, many of them identified during the Pitch Bowl/Spark Collider. The inaugural round of STRATFI contracts totaled \$545 million. This included \$101 million in SBIR funds as well as \$102 million in matching funds from 31 government agencies. Sixty-seven private-sector entities will invest another \$342 million.

FY20 STRATFI RESULTS



18 STRATFI enhancements awarded



\$101M in SBIR funds

\$102M in matching government funds

\$342M in matching private funds over a four year period of performance.



Matched funding committed by

31 government organizations and **67** sources of private capital.

The average award for this first STRATFI round was \$5.6 million in SBIR funds, \$5.6 million in other government funds, and \$19 million in private cash.

STRATFI recipients for FY2020 include: Aerial Applications, Analytical Space, Anduril Industries, Applied Minds, Edgybees, Essentium, Falkonry, ICON Technology, MOJO, Merlin Labs, Orbital Insight, Orbital Sidekick, Pison, Privoro, Swarm Technologies, Virtualitics, Wickr and Wafer.

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The inaugural Pitch Bowl and Spark Collider event was quickly transitioned to an all-virtual event in the span of three days, including presentations for the initial STRATFI awards.

STRATFI was one of three approaches identified during the March event.

Air Force officials also announced AFVentures would award entry-level SBIR Phase I contracts of up to \$50,000. The contracts, dubbed "Small Bets," help new companies or ideas with potential Air Force and Space Force customers to explore technical feasibility.

In addition, AFVentures also would issue approximately 300 SBIR Phase II awards each year for companies that found potential customers for their technology. Contracts in this category, also called a "Product-Market Match," start at \$750,000 with the potential for further awards. Product-Market Match contracts are awarded after company executives make pitches in live or virtual Pitch Days.

The end user of technology funded through STRATFI must be at the strategic level-such as a

major command, a direct reporting unit, a numbered Air Force, a field-operating agency, or headquarters Air Force.

The Pitch Bowl and Spark Collider initially was planned as a three-day, in-person defense innovation event with 600 collaborators in Austin, Texas. The in-person event in Texas was canceled amid growing concerns of COVID-19. However, in the span of three days, the Air Force and its joint partners quickly pivoted to a one-day virtual event. The March 12 event included keynotes, presentations and collaborative engagements with more than 5,000 online and small-group attendees across the country from government, industry, and academia. The quick-turn virtual experience boasted more than 150 individual events in 15 virtual rooms over the course of 8 hours. 🧔

CONTRACTING SPRINTS

In Fiscal Year 2020, the Air Force continued looking to contracting sprints as a tool for quickly evaluating Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program proposals and awarding contracts.



The Air Force Contracting Sprint is an accelerated acquisition process, which evaluates potentially innovative technologies for further development, via a streamlined review-and-award process

to make it simpler and faster for small businesses to work with the Air Force.

All companies receiving contracts are small, startup businesses with innovative ideas to develop, which can meet national security challenges, or provide game-changing expansions in capability.

During one Contracting Sprint, the Air Force awarded a record 350 contracts totaling \$22 million in four days. More than 700 companies submitted proposals for evaluation during this particular sprint.

About 75 personnel from across the Air Force gathered to push the bounds of streamlined contracting, while simultaneously building on accomplishments from previous Contracting Sprints.

Most participants were acquisition professionals. However, representatives from teams of technical evaluators and program managers, finance officers, contract writing system (CON-IT) support, and software automation personnel also participated. In

addition, observers from the Air Force and NASA were present to witness firsthand the strides being made and challenges being overcome by the team.

EVOLUTION OF CONTRACTING SPRINTS

Contracting sprints were introduced in October 2018.

During the first Contracting Sprint, officials awarded approximately 100 contracts. A second contracting sprint in February 2019 resulted in 150 contract awards. A third contracting sprint resulted in 450 contracts being awarded over 12 days.

Contracting Sprints are unique from the Air Force's other efforts with startups and small businesses, called Pitch Days. Contracting Sprints focus on awarding a large number of contracts rapidly. Conversly, Pitch Days allow pitch presentations by proposing companies and selections on the spot for a more limited number of companies.

The sprints are designed to cut the time required to award contracts to businesses researching and developing disruptive technologies critical to the warfighter. This approach supports a wider effort by Air Force acquisition officials to create a swifter, more agile process for securing cutting-edge technologies.

In addition to an Air Force contract award, each company is provided information on obtaining private sector matching funds via angel investors and venture capital organizations, which can boost each company's initial operating budget.

More information on the next contracting sprints and deadlines to submit proposals, is available at: www.afsbirsttr.af.mil/program/Overview or www. AFWERX.af.mil/sbir.html . Information on upcoming Air Force Pitch Days is available at: www.afsbirsttr.af.mil/ AF-Pitch-Day/How-to-submit/.

A WEEK IN THE LIFE OF ONE CONTRACTING SPRINT BY THE NUMBERS

DAYS

75
PERSONNEL

350
CONTRACTS AWARDED

700
COMPANIES
Submitted Proposals

\$22,000,000 TOTAL CONTRACTS AWARDED VALUE

2020 Year in Review 13

PITCH DAYS

Pitch Days continued to expand in reach and scope throughout 2019 and 2020, including the inaugural Air Force Pitch Bowl, which took place in 2020 and found eligible companies vying for STRATFI (strategic financing) awards at much higher dollar amounts.

Pitch Days are a combination of product expo and "Shark Tank"-style reality TV show.

Air Force experts select the most promising developers from an initial review of proposals. That group then pitches ideas to a panel in hopes of landing SBIR/STTR funding contracts.

These events allow the Air Force to tap into the nation's existing commercial expertise and technologies. They also provide a catalyst for innovation and partnership with small businesses.

To ensure the greatest impact, the Air Force executes these events in partnership with other services, government entities and venture capital communities.

Fueled by the success of the inaugural Pitch Day in March, 2019, the Air Force unleashed a fusillade of

similar events early in FY 2020. These in-person events were held in such disparate locations as California, Florida, New York, and Ohio.

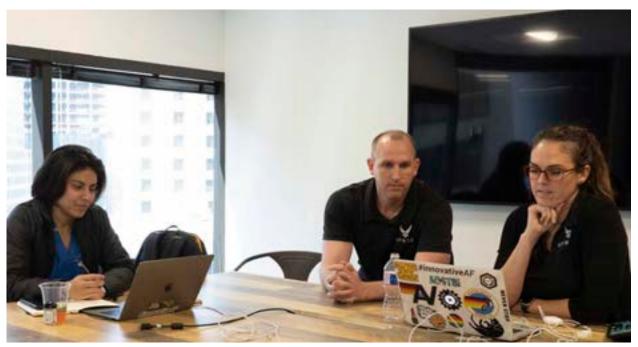
Dozens of companies collectively received tens of millions in Phase I and Phase II funding contracts to support development and eventual commercialization of their technology.

PITCH BOWL/SPARK COLLIDER

In March 2020, officials held the first Pitch Bowl/Spark Collider and unveiled AFVentures, one of AFWERX's three branches, and the STRATFI funding program. Initially, the Pitch Bowl had been slated for Austin, Texas. However, COVID-19 virus concerns prompted the last-minute cancellation of the in-person event and the quick launch of a virtual version.

Speaking from Washington, D.C., Dr. William Roper, former Air Force Assistant Secretary for Acquisition, Technology, and Logistics, announced a combined award of nearly \$1 billion in contracts to more than 550 small businesses. This included roughly 20 SBIR Phase II companies identified as potential STRATFI recipients who, combined, could receive more than \$500 million in financing.

As of January 2021, AFWERX had awarded STRATFI contracts to 18 firms. The initial round of funding agreements totaled \$545 million. This



Members of the AFWERX Austin team listen to Small Business Innovation Research (SBIR) Phase I companies pitch their solutions as part of the technical selection process to Phase II during the Virtual Spark Collider and Pitch Bowl in Austin, Texas, March 13, 2020. The quick-turn virtual experience boasted more than 150 individual events in 15 virtual rooms over the course of 8 hours. (Photo by Staff Sgt. Jordyn Fetter)



Secretary of the Air Force Barbara Barrett speaks during the commencement of the U.S. Air Force Space Pitch Day, Nov. 5, 2019, San Francisco, Calif. Air Force Space Pitch Day is a two-day event hosted by the U.S. Air Force to demonstrate the Air Force's willingness and ability to work with non-traditional startups. (Photo by Senior Airman Christian Conrad)

included \$101 million in SBIR funds as well as \$102 million in matching funds from 31 government agencies. Sixty-seven private-sector entities will invest another \$342 million.

The average STRATFI award was \$5.6 million in SBIR funds, \$5.6 million in other government funds, and \$19 million in private cash.

Other FY2020 Pitch Day events focused on such topics as hypersonics, space, simulators and quantum technology.

REFINING THE PITCH DAY CONCEPT

The inaugural Pitch Day was held in New York City in fiscal year 2019. Execution of that event focused on "proof-of-concept" for pitch days as a vehicle for evaluating technology, awarding contracts to small businesses, and paying on contracts in a matter of minutes.

Despite the initial success, officials have continued to adapt and refine Pitch Days for wider use in the Air Force. Presently, there are two types of Air Force Pitch Days, the Franchise model and Centralized model.

Franchise Pitch Days, originally requested by SAF/AQ in 2019, are aligned with a host organization, such as a Program Element Office, Division, etc., and focus on the needs identified by that organization. They align with the general purpose of a Pitch Day,

which is showcasing cutting-edge technologies from domestic small businesses in a public forum, and providing a venue for professional networking between government organizations and small business concerns.

The Managing Organization Project Manager leads the Franchise Pitch Day with support and guidance from the Air Force SBIR/STTR Center of Excellence (COE) and solicits and receives funding to support the event from SAF/AQ (through the Program Element Office or Technical Executive Officer).

Centralized Pitch Days, originally requested by SAF/AQ in March 2020, are a SBIR/STTR competition for Phase II contract awards and focus on needs identified by Program Element Offices, Technical Executive Office and Centers. They align with the general purpose of a Pitch Day, which is showcasing cutting-edge technologies from domestic small businesses in a public forum, and providing a venue for professional networking between government organizations and small business concerns. Centralized Pitch Days are developed strategically with Air Force technical and engineering leadership and liaisons and are expected to occur in conjunction with a topic from each DoD Broad Agency Announcement.

The Air Force SBIR/STTR Program Office leads the Centralized Pitch Days with Dr. Aerial Kreiner as the

content chair leading the technical content and strategy. The content chair works with DoD working groups and senior technical leadership to identify broad, highimpact efforts. The COE often leads the contracting and finance required to support these events.

The ideal Centralized Pitch Day includes SBIR Direct-to-Phase II and STTR Phase I selection as this competition possesses potential for capturing small business concerns who have not worked with the Air Force previously. However, options also exist for: SBIR Phase I, STTR Phase I Pitch Day; SBIR Phase II, STTR Phase II Pitch Day; and SBIR D2P2, STTR Phase II Pitch Day.

Note: Phase II proposals require a two-phase downselect process, and the Air Force SBIR/STTR Program's Director of Contracting recommends the contracts are awarded at the following contracting sprints.

The Air Force Pitch Day includes six core elements (as identified by Dr. Roper, former SAF/AQ):

- 1. Air Force receives pitches from businesses and makes decisions to award;
- 2. Pay-in-a-day (doesn't have to be GPC; can be electronic transfer);
- 3. Contracts awarded on the spot;
- 4. Structured match making/networking between companies and greater audience;

- 5. Organizations will put manpower, event funds forward to make execute (i.e., evaluations, contracting officers, travel, event space leasing);
- 6. Simplified proposal and shortened evaluation.

PITCH DAY BACKGROUND/HISTORY

In the fall of 2018, the Secretary of the Air Force at the time, Dr. Heather Wilson, and Dr. Roper, expressed the desire for Air Force innovation to operate at pace with businesses.

The Air Force Pitch Day concept was proposed as one avenue to highlight the Air Force SBIR/STTR funding source as a pathway to the government marketplace and to engage startups and nontraditional small businesses in a commercially relevant direction to market. Wilson and Roper wanted to tap into the nation's startup and small business ecosystems to solve challenging warfighter needs, demonstrating that new processes could occur more rapidly than traditional contracting processes.

One key tenet was that the Air Force should operate at the contracting and payment timetables startup and small companies need to remain economically viable.

Air Force leadership set out a number of goals to highlight a "faster, smarter" Air Force at the Air Force Association Conference in 2018, announcing plans for the March 2019 inaugural Air Force Pitch Day event.

FY2020 PITCH DAY RESULTS* TOTAL SBIR FUNDING AWARDED **TOTAL OTHER GOVERNMENT FUNDING AWARDED** TOTAL FUNDING AWARDED *Includes previously reported data to reflect actual Fiscal Year 2020 results.



Todd Davis, Armament Directorate, looks on as Marcie Black of Advanced Silicon Group, signs contract documents during the Air Force's first Hypersonics Pitch Day Nov. 7, at the Doolittle Institute in Niceville, Fla. Nine small businesses were invited to pitch their ideas to an Air Force acquisition and technology leadership panel. More than \$5.25 million was awarded to seven small businesses in less than three hours. The purpose of Air Force "pitch days" is to do business at the speed of ideas by inspiring and accelerating startup and small business creativity toward answering national security challenges. (Photo by 2nd Lt. Karissa Rodriguez)

Undertaking this endeavor demonstrated that the Air Force was serious about attracting startups and would be capable of acting quickly as a technology development partner.

The objectives were to:

- Generate broad topic verticals based on customer challenges;
- Conduct a large event geared towards startups with participation from government, academic, commercial and private/venture investors;
- Conduct live pitches for innovative ideas and make "on-the-spot" source selections of companies for Air Force contracts;
- Establish a legally sufficient one-page contract;
- Use government purchase cards (GPCs) for day one, on-the-spot contract payment.

The initial Air Force Pitch Day was comprised of two elements used in the commercial world -- the pitch competition, and the demonstration day.

A pitch competition is an event often used by universities, companies and startup ecosystems to allow a set number of firms to present or "pitch" their business ideas/solutions to a panel or group of people. The expectation is that a subset of those pitches will be awarded "seed funding" to further develop their

business idea.

A demo day usually occurs at the end of a startup or technology accelerator program with select companies demonstrating their business viability and possibility (i.e., market fit, customer discovery, initial sales) to a large audience of potential investors. In both cases, the presentation is conducted in a rapid fashion (five to seven minutes) and funding decisions are made based on the presentation.

The Air Force anticipated additional benefits as a result of hosting pitch days, including the following:

- Face-to-face interactions between the proposing companies and the government program managers offering the ability for the government to ask questions and receive answers on the spot
- Engagement between small business concerns and other possible partners and investors.

With the blessing of Air Force leadership, the Air Force SBIR/STTR Program Management Office launched the Air Force Pitch Day concept in FY 2019, beginning with a two-day event in New York City in March 2019. The introduction of the pitch day marked a dramatic shift in the Air Force's acquisition strategy, creating a faster, more deliberate methodology for contracting with small business concerns.

INAUGURAL PITCH DAY, MARCH 6-7, 2019

During the 30-day period leading up to the first pitch day, and resulting from proposal submissions collected during the Department of Defense's 18.3 Broad Agency Announcement, Air Force contracting officials reviewed 417 submissions. Of those submissions, they invited 59 businesses for in-person pitches in New York City on March 6, 2019. Of those invited to pitch with personnel from the Air Force Program Element Offices (PEOs) for Digital, Command, Control, Communications, Intelligence and Networking, and Special Forces, 51 received an initial SBIR Phase I contract of \$158,000. Initial payments were made within minutes of their presentations using a GPC.

During the week prior to the inaugural pitch day event, the Air Force also conducted a series of rapid contracting sprints, awarding 122 Phase I SBIR contracts totaling \$6 million. They also awarded 69 Phase II SBIR contracts totaling \$60 million, 11 of which featured government matching contributions and five contracts with private matching. During the entire week, including Pitch Day, the Air Force awarded 242 SBIR contracts valued at \$75 million. 🧔

GSA AGREEMENT

A program in which the U.S. General Services Administration performed Phase III contracting on behalf of the U.S. Air Force produced 13 Phase III contracts in Fiscal Year 2020. The contracts totaled nearly \$1.2 billion.



The SBIR Phase III pilot program was initiated in May 2018 with the GSA SPE's authorization. It became permanent in March 2020. Two AAS offices (Client

Support Centers 5 and FEDSIM) provide support for the program.

Phase III funding, which comes from sources outside of SBIR/STTR, can go toward accelerated development and integration of SBIR/STTR technologies. This phase represents a critical commercialization benchmark of the Air Force SBIR/STTR Program.

The GSA-SBIR agreement allows organizations throughout the Air Force, as an alternative, to obtain Phase III assisted acquisition services support from GSA on a fee-for-service basis.

Between fiscal years 2018 and 2020, GSA awarded 63 SBIR Phase III contracts, 32 IDIQs, 24 Definitive Contracts, and 3 Purchase Orders. Roughly 60 percent of those awards were on behalf of the Air Force.

A key feature of SBIR/STTR Phase III is the ability to award a sole-source contract to a small business for technology it has already developed under the program. By law, competition requirements are satisfied when a business receives a Phase I and/or Phase II contract award.

The interagency agreement allows Air Force organizations to obtain GSA assistance to award and administer Phase III contracts with any eligible small business, regardless of which agency sponsored the Phase I and/or Phase II efforts.

It is not applicable to STTR topics. 🧔

AWARDS MADE UNDER GSA AGREEMENT 13 Companies Awarded Phase III Contracts in FY2020 \$118 BILLION Awarded Funds in FY2020 Air Force Organizations Supported \$1,000 Average Award Time \$1,000 BILLION Awarded Funds Since FY2018

SBIR TAP

The Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program modified its Technology Acceleration Program (TAP) so it could continue providing technology-transition training to SBIR firms during the COVID-19 pandemic.



The Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program modified its Technology Acceleration Program (TAP) so it could continue providing technology-

transition training to SBIR firms during the COVID-19 pandemic.

TAP is a joint effort between the United States Air Force, the Air Force Research Laboratory (AFRL), Wright Brothers Institute (WBI), and The Entrepreneurs Center (TEC). SBIR/STTR is a congressionally mandated national program supporting Air Force needs by funding critical technology for the warfighter. The program also promotes technological innovation while fostering and encouraging participation in innovation and entrepreneurship.

TAP focuses on preparing SBIR Phase I companies to pursue Phase II SBIR contracts as well as improving their transition and commercialization rates. To achieve this, TAP imparts important business skills and knowledge necessary for long-term success to SBIRfunded companies and entrepreneurs. The program shows SBIR recipients how to assess their technology's commercial prospects, draw up commercialization plans, and expand their network. It also prepares these companies to seek private or public investment capital.

The TAP process consists of two consecutive phases-Commercialization Training Delivery and Opportunity Discovery-for independent cohorts, or groups. Each cohort included roughly one dozen companies. The first cohort was launched in October 2020. However, planning, marketing, candidate screening and other preparations occurred in FY2020 as TAP organizers pivoted to deal with disruptions caused by COVID-19.

TAP is free to SBIR-funded companies. Businesses awarded contracts for the 19.2, 19.3 and 20.1 Broad Agency Announcements (BAA) were eligible to participate in the six cohorts.

TAP PREVIOUSLY OFFERED IN-PERSON CLASSES

Before the pandemic, SBIR TAP consisted of twoday, in-person training sessions in Ohio, Virginia, and Maryland, as well as virtual learning and collaboration components. More than 80 companies participated in TAP in FY 2019, double the previous year's volume.

While this approach was successful, travel limitations and social distancing requirements related to COVID-19 made in-person classes impractical, at least for the moment.

SBIR TAP seeks participants having technologies within key commercial market areas including:

- Advanced Manufacturing
- Data Warehousing, Management and Analytics
- Cyber Security
- Energy Storage and Generation
- Environmental Monitoring
- Health Care
- Human Performance Enhancement
- Internet of Things
- Personalized Learning
- Precision Agriculture
- Automated Transportation

Participants use proven visual tools and techniques to clearly identify the business value inside science or technology innovation. Each participant also develops actionable and specific commercialization plans, aligned with the existing support services and organizations, so commercialization assistance will continue after the AF SBIR/STTR Program formally ends.

The SBIR TAP is built on a proven set of methodologies used by WBI and TEC. The primary methodology is the Wendy Kennedy Commercialization Training Program. Kennedy's program features a wellestablished methodology to assist technologists and scientists in understanding and articulating their value proposition; understanding industry and market; and thinking through the unique attributes of their offering.

TEC adds complimentary materials that have been honed to meet the needs of SBIR companies as they advance their commercialization efforts. This curriculum includes customer discovery modules, development of a Business Model Canvas or Mission Model Canvas, and pitch/communication training.

SBIR TAP participants also benefit by learning from others in their cohort. In addition to networking, participants help each other hone their value proposition, talk through customer discovery, and share ideas and connections that may advance technology. TAP staff establishes a LinkedIn group for each cohort, providing a forum for companies to post questions or discuss business challenges. 🥼

FRAUD, WASTE, AND ABUSE

In accordance with Section 9(f) of the SBIR and STTR Policy Directive released May 2, 2019, the Air Force provided training to ensure compliance with the eligibility requirements for the SBIR and STTR programs.



During Fiscal Year 2020, the Air Force SBIR/STTR Center for Excellence continued to work to make sure firms were aware of and complied with those policy directives. The Center for Excellence required all participating firms

to complete training and provide a signed completion certificate prior to contract award, noting that failure to comply with these requirements would result in their SBIR/STTR proposal being ineligible for award.

The Air Force SBIR/STTR Center for Excellence continues to execute program initiatives to maintain and enhance strong deterrents by making it more difficult to commit fraud on Air Force SBIR/STTR contracts and providing better evidence when it does happen. The changes made in previous years have had a significant impact by putting the government in the strongest possible position to hold a fraudulent contractor accountable.

Two major components of these efforts are as follows:

 Requirement that proposers and their principal investigators are to review training slides of program rules and attach certificates of completion with every proposal submitted. Inclusion of a contract clause that requires companies to identify the principal investigator for each SBIR/STTR contract and requires written approval from the Air Force prior to making a change. This is designed to deter bait-and-switch schemes, in which contractors propose an experienced researcher as the principal investigator then use a lesser-qualified, lower-cost employee to serve in that role.

Fighting fraud protects the integrity of the government's procurement process, saves precious taxpayer dollars and mitigates significant threats to the safety of our warfighters. "Contractors that put the warfighter in danger and impede this program's ability to provide the best return on investment for the taxpayer will not be tolerated," said David Shahady, Air Force SBIR/STTR Center for Excellence Director.

The Air Force SBIR/STTR efforts were led by the Air Force Office of Special Investigations - Office of Procurement Fraud Investigations Directorate, which partnered with a team at Wright-Patterson Air Force Base in Ohio. The team included Air Force Materiel Command's Law Office Procurement Fraud Division, the Air Force Research Laboratory Contracting Office, and the SBIR/STTR Center for Excellence.

FY2020 STATISTICS

NEW SBIR-RELATED

CASES OPENED: 20

SBIR-RELATED

CASES CLOSED: 13

SBIR-RELATED

CASES ONGOING: 27

DOLLARS RETURNED TO THE U.S. GOVERNMENT DURING FY20:

\$6,851,000.00*

*All monies recovered in FY20 were returned to the United States Government

TECH WARRIOR ENTERPRISE

The Air Force Small Business Innovation Research/Small Business Technology Transfer Program and Tech Warrior Enterprise teams had planned on taking Tech Warrior OPS events on the road in Fiscal Year 2020.



Since the program's 2017 inception, Tech Warrior OPS had been held at the National Center for Emergency Medical Readiness' campus in Fairborn, Ohio, either as a standalone event or in

conjunction with military or first responder training.

However, Tech Warrior and Air Force SBIR/STTR officials had planned on holding an OPS event in Pryor, OK. This effort grew out of Tech Warrior's previous collaboration with the Oklahoma Air National Guard (ANG), the Adjutant General, Oklahoma Small Business Development Center (SBDC) and local business vendors on small business science and technology engagement events.

This would have marked Tech Warrior OPS' first foray outside Ohio, including staging realistic scenarios to test products and technology. Unfortunately, travel restrictions fueled by COVID-19 forced officials to shelve plans for an out-of-state OPS event for the year.

PIVOTS TO VIRTUAL EVENTS

Like other government and private-sector entities, several Tech Warrior events supporting Air Force SBIR/STTR moved online. With the pivot to a virtual environment, the Tech Warrior team began work on future Tech Warrior Ops events. Though these events would occur in FY 2021, preparation for the events in FY 2020 was key to their success.

In late summer 2020, the Tech Warrior team began preparations for the first Tech Warrior Cyber OPS event. Scheduled for October 5-9, 2020, the virtual cyber event would provide eight small businesses an opportunity to virtually pitch their technologies to Air Force and other military officials.

The event would feature warfighters applying eight small businesses' technology to critical military challenges. One challenge was designed to focus on the Internet of Things Discovery and Characterization, while a second stressed Assuring Data Over Untrusted Infrastructure. On the final day, businesses were scheduled to receive feedback on their technology from warfighters who would use it during the challenge exercises.

In addition to the challenges, the cyber event would include presentations by such sponsoring

organizations as the Air Force Research Laboratories Small Business and T3 programs; the AFRL Information Directorate; and the Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program, and USCENTCOM.

The Air Force SBIR/STTR Program and its small business partners strive for advancements that support Air Force Major Commands, system program offices and many others to meet near-term critical needs while filling the pipeline with potential gamechanging technologies.

Planing and development also occurred for a second event, also set for October. The virtual Tech Warrior Medical/Tactical OPS was designed to provide more than 50 small businesses the opportunity to demonstrate and test their medical and tactical technologies.

Those same companies, hailing from around the United States, would have the opportunity to virtually demonstrate and pitch their technology to subjectmatter and industry experts as well as government tech scouts during the October 19-23, 2020 event.

Sponsors included the Air Force Small Business Innovation Research/Small Business Technology Transfer Program, small businesses concerns, Manufacturing Extension Partnerships, APEX, 59th Medical Development Wing, Naval Medical Research Unit, Air Force Life Cycle Management Center, USCENTCOM, USTRANSCOM, TATRC Medical, Army ERDC and USSOCOM.

For the Air Force, this event would provide a way to increase interaction with small businesses across the country and to grow the defense industrial base, organizers say.

Also during the year, Tech Warrior Enterprise submitted 20 small businesses to the Air Force SBIR/STTR office to aid COVID response efforts. The companies are participants of the Tech Warrior Enterprise program.

Additionally, the organization conducted 73 Tech Warrior CONNECT events involving small businesses from across the nation. Tech Warrior CONNECT allows small businesses an opportunity to receive early feedback and to perform simple testing on their technologies, all of which furthers product development.

In addition, Tech Warrior hosted 10 virtual Ask Me Anything (AMA) sessions which drew more than 300 small businesses. The AMAs allowed companies to gain information on Tech Warrior OPS and pose questions to Tech Warrior Enterprise's expert staff.

In July 2020, Tech Warrior Enterprise teamed with the Catalyst Campus in Colorado Springs, CO, on the Joint Space OPS event, attended by 50 small businesses. Joint Space OPS provides participating small businesses the opportunity to receive feedback on their technology by U.S. Air Force subject matter experts.

And in September, representatives attended the Kansas SBDC Encountering Innovation event, where the Tech Warrior Enterprise team listened to 51 companies pitch and demo their science and technology solutions for warfighters. The Tech Warrior Enterprise team also led a panel discussion on how the U.S. Air Force supports small businesses. 🧔

THE AIR FORCE SBIR/STTR'S OPERATIONAL EXPERIMENTATION AND **DEMONSTRATION PILOT (TECH WARRIOR ENTERPRISE)** originally launched in December

2017. It became part of a permanent, year-round SBIR/STTR Program endeavor in FY2019.

Tech Warrior Enterprise includes two types of events, TECH WARRIOR CONNECT and **TECH WARRIOR OPS.** Designed to accelerate critical tools and solutions developed by small businesses for the warfighter, these events provide a venue where small businesses, government customers and end-users can collaborate.

> Tech Warrior CONNECT provides situational awareness of Air Force SBIR/STTR Program opportunities, strategic introductions and collaboration. Furthermore, small businesses also can access face-to-face, immediate contact with and feedback from potential users.

Tech Warrior OPS events take place in an active training environment with one or more end-user communities. Hands-on use of technology by warfighters, special operators, first responders, etc., yields opportunities for small business to ask questions, gather specific data, interview operators, and integrate their technology with training scenarios taking place in a realistic environment.

Tech Warrior OPS provides a venue where small businesses can put their product or technology into the hands of military operators, first responders or other expert users who test them in various scenarios.

Small businesses with a Department of Defense research and development contract, including those involved in the Air Force SBIR/STTR, are welcome to participate in the Tech Warrior Enterprise. For information, they should go through their government contact or by contacting twenterprise@parallaxresearch.org.

Companies can participate in Tech Warrior events for free. But, where applicable, they must pay travel expenses. 🥼

OUTREACH

MARKETING + **COMMUNICATIONS**



In FY2020, the Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Center for **Excellence faced unprecedented challenges** in its outreach efforts due to the pandemic. This led to a virtual pivot, and a cancellation of all in-person events. In their place, the outreach team led a series of virtual events. tailored toward reaching previously untapped groups and making it easier for underserved communities, including minority, veteran, and women-oriented organizations and universities to improve engagement and participation with the Air Force SBIR/STTR program.

The Marketing and Communications group participated in a number of webinar events, increased the program's social media presence, generated success stories in written and video format, and improved the program's virtual footprint in order to better represent the Air Force SBIR/STTR program to the communities it intends to reach.

Photo by Mass Communication Specialist 2nd Class Eric Coffer



SUCCESS STORIES

Hundreds of small businesses successfully moved into Air Force Small Business Innovation Research Phase II contracts. In addition to the Phase II successes, a number of those small businesses secured Phase III contracts in FY2020, a critical commercialization benchmark. Phase III dollars can come from either government or private-sector sources. Phase III awards fund accelerated development and integration of SBIR-supported technologies.



A 2018 pilot program in which the U.S. General Services Administration performs Phase III contracting for the U.S. Air Force helped drive these successes. Since its inception, that program has

resulted in \$1.94 billion Phase III contracts for Air Force SBIR companies. Through the pilot program, Air Force SBIR/STTR received contracting support from the GSA's Assisted Acquisition Service's (AAS) Great Lakes Region (Region 5) and AAS's Federal Systems Integration and Management (FEDSIM) teams. The SBIR Phase III pilot program was initiated in May 2018 with the GSA SPE's authorization. A sampling of the small businesses who achieved success in 2020 follow:

Company: **Pretalen LTD** Socio-Economic Category: **Other than Small** Ceiling: **\$55M** Contract Type: **IDIQ**

This Maintenance, Evaluation, Testing and Modernization of Radio Frequency Subsystems (METAMORFS) contract will extend the PANACEA Phase I (FA8650-12-M-1332) and II (FA8650-13-C-1517) contracts. The Phase I PANACEA developed an automated tool to test GPS receivers in a controlled manner. It made use of commercial off-the-shelf test equipment and new software that can be used in a distributed manner across the US, with a common database that is shared. PANACEA Phase II refined the hardware and software in essentially the same configuration. Another PANACEA Phase III (FA8650-18-C-1655), entitled APRIME, extended PANACEA into the testing of non-GPS devices, such as radios, using the same concept. This METAMORFS Phase III is focused on the hardware and software items that are used in these systems, specifically the Software Defined Radios that are used in both PANACEA and APRIME (PANACEA Phase III).

Company: **The Perduco Group** Socio-Economic Category: **Other than Small** Ceiling: **\$98M** Contract Type: **IDIQ**

This Phase III award will build upon the research completed during Phase I, Topic AF15-AT14, "Modeling and Simulation for Design, Development, Testing and Evaluation of Autonomous Multi-Agent Models." Currently, there is a lack of smart platform mission planning tools (e.g. mission planning is still done using whiteboards). Development, technology maturation, and rapid deployment of new solutions are needed to deliver a solution for the mission planning technology gap. The Phase I work laid the foundation for a broad-based enterprise to address mission planning and addressed items such as: Data Logging Engine, Logging Server Infrastructure, Dynamic Visualization Front-end, Graphical User Interface (GUI), and Performance Data Processing Output. The Phase III funding will build upon this work to develop and field operational smart mission planning technologies and capabilities.

Company: **Edaptive Computing Inc.** Socio-Economic Category: **WOSB** Ceiling: **\$200M** Contract Description: **IDIQ**

This program seeks to advance the state-of-theart for the design, development, optimization, implementation, acquisition and sustainment of the Air Force's secure and trusted hardware systems. This effort will continue to implement and integrate SBIR Phase I and Phase II methodologies, technologies and tools to assist the Air Force and other Defense Dept. entities in design, development, acquisition, and sustainment of trusted and secure hardware and electronics. Additionally, it will promote research and development, automation, analysis and optimization of systems-engineering processes. This should produce robust methods for reducing vulnerabilities, improving mitigation-and-protection technologies, and improving operational employment and trustworthiness throughout the target system's lifecycle.

Company: **Cosmic AES** Socio-Economic Category: **WOSB** Ceiling: **\$340M** Contract Type: **Definitive**

This Phase III contract includes engineering, software development and other services required to extend or complete Cosmic AES' efforts under its prior SBIR Phases I and II contracts awarded in response to topic AF-171069. This SBIR Phase III contract is derived from the SBIR Phase II Improved Data Fusion Techniques for Space-Based Remote Sensing and the Hardware Abstraction Layer (HAL). This contract will further develop Cosmic AES' Open and Extensible Voxel Fusion Engine (OpenVFE) Data Fusion Techniques for Space-Based Remote Sensing in support of United States Space Force (USSF) Directorates. The mission activities supported will include Missile Warning, Missile Defense, Space Situational Awareness, Battlespace Awareness, Technical Intelligence and the emergent Space Combat Range (SCR) Risk Reduction Program.

Company: Revacomm, Inc. Socio-Economic Category: SDB 8(a) Ceiling: \$59M Contract

Description: IDIQ

Platform One is the Defense Dept.'s centralized, secure platform for the future of software development. It exists as a collaborative effort between multiple organizations across the Defense Dept. including the Air Force Chief Software Office, Space Commercially Augmented Mission Platform (CAMP), TRON, Unified Platform, F-16, Ground-Based Strategic Deterrent (GBSD) and F-35. The mission of this organization is to provide a direct avenue for the 100,000 Airmen, contractor, and civilian software teams of the future who will need a modern technology delivery capability to remain competitive in a rapidly changing global landscape. This procurement will extend the work previously accomplished in SBIR Phase I and II by RevaComm to enable Platform One and all of its partners to utilize industry best practice DevSecOps principles in a military context. This includes the research done in Phase I and II on Risk Management Framework (RMF) and platform capabilities, as well as the infrastructure, manning, training, and equipping of service members, Government civilians, and

contractors.

Company: Sitscape, Inc. Socio-Economic Category: **SDB** Ceiling: **\$14.3M** Contract Description: **Definitive**

This Phase III will leverage technologies developed under the previous SBIR Phase II contract to design new software for software enhancements utilizing SitScape DEEP technologies and maintain the software/hardware via software updates and hardware replacements SitScape is implemented with standard hardware and implemented by means of software on modified commercial off-the-shelf hardware.

Company: **Nimbis Services, Inc.** Socio-Economic Category: **SB** Ceiling: **\$200M** Contract Description: IDIQ

This effort will continue and expand upon the work that Nimbis Services Inc. (Nimbis) completed in previous phases in response to SBIR Topic SB092-006, "Digital Analysis Computing Software Solutions for the Supply Chain". This procurement builds upon the feasibility study, research and development, and prototype of an open portal development environment marketplace that was conducted and completed in Defense Advanced Research Projects Agency's (DARPA) Phase I (award # W31P4Q-10-C-0056) and Phase II (award # HR0011-11-9-0003) awards.

Company: ITA International, LLC Socio-Economic Category: Other than Small Ceiling: \$49.3M Contract Description: **Definitive**

This SBIR Phase III will leverage the SBIR technology framework, LOGCOP, to incorporate multiple data input systems into a high-level information decision support system. The 53 EWG's objective is to stand up the 350th Spectrum Warfare Wing (350 SWW) and in accordance with DoD and Air Force strategy, create a data driven organization. This Phase III will extend the LOGCOP information sharing architecture to create a Common Operational Picture (COP) to assist with the decision-making processes of the 53 EWG/350 SWW and create a data driven organization.

Company: IBC Materials & Technologies, LLC Socio-Economic Category: **SB** Ceiling: **\$65M** Contract Description: IDIQ

The purpose of this Phase III effort is to extend the work done by IBC in Phase I. Under this contract, IBC will identify, develop, test, evaluate, apply and manage advanced surface treatments, coatings,

manufacturing and repair techniques for both new and existing systems to protect against corrosion and improve performance and durability at the component level. Improved surface/interface durability and performance reduces the demand on available field-level resources, lowers system-sustainment costs and improves operational availability (AO) through reduced component Mean-Time-Between-Failure (MTBF). This includes services provided by the contractor, as well as the purchase, installation and support of equipment and processes to be performed at DoD maintenance facilities.

Company: **AQYR Technology** Socio-Economic Category: **SB** Ceiling: **\$33.2M** Contract Description: **IDIQ**

AQYR Technology was awarded a Phase I SBIR contract based on Topic 011SN-0382: "Disposable Tactical Satellite Antenna System" and a Phase II SBIR contract based on Topic 011SN-0382: "Tactical User Antenna - Global Broadcast System (TUA-GBS)". During these initial SBIR phases, AQYR Technology developed the concept of the Portable Receive Suites. This Phase III contract completes the work of the SBIR I and II by including all of the work required to produce and sustain the AN/PRS-11 (includes AN/PRS-11 and AN/ PRS-11A) Suitcase Portable Receive Suites (SPRS) and AN/PRS-12 Rucksack Portable Receives Suites (RPRS). The tasks will include managing the Portable Receive Suites (PRS) program, providing engineering support to the program, producing new PRS, purchasing spare parts and shipping to DoD organizations, repairing PRS already in operation, executing engineering change proposals (ECPs), and conducting training.

Company: **Learntowin Inc.** Socio-Economic Category: **SB** Ceiling: **\$2.6M** Contract Description: **Definitive**

This Phase III effort will leverage capability developed by Learntowin, Inc., under AFWERX's SBIR Phase II training platform modification initiative. With the capability already demonstrated, the objective of the SBIR Phase III is to apply this technology to new IG-Enterprise training for dynamically adaptable micro-learning curriculum development and delivery, testing/knowledge assessment, student/classroom real time analytics, and continual education after the students have graduated from one of the five courses

offered.

Company: **The Perduco Group** Socio-Economic Category: **Other than Small** Ceiling: **\$57.7M**

Contract Description: IDIQ

The Perduco Group was awarded a Phase I SBIR contract based on Topic AF191-090: "Maintenance Data Integrity Study and Logistics Linkage". The initial study focused specifically on mapping maintenance system/subsystem data to supply chain data and developing basic system architecture to store and manage the integrated data. Benefits to creating and sustaining authoritative, integrated operational data sources that link maintenance and supply chain data include increased accuracy in maintenance and supply data documentation, improved logistics cost analyses, increased accuracy of requirements forecasts, enhanced analytical capabilities, and increased efficiency of parts ordering. This Phase III contract will support the integration of much more comprehensive data sets and the adoption of decision-support capabilities that leverage and expand upon the Phase I SBIR to increase the analytical rigor needed to inform Air Force and Department of Defense (DoD) logistics and sustainment decisions.

Company: **Resolution Imagery, Inc.** Socio-Economic Category: **SDB** Ceiling: **\$9.3M** Contract Description: **Definitive** contract. This Phase III extends the SBIR Phase I effort that was completed by the contractor in response to USAF SBIR Phase I Topic AF192-001. This effort shall derive from and extend the work from the Phase I contract to establish a functional immersivetraining medium for the Air Force providing: (i) ITS Beta launches including user testing and usability reporting, (ii) delivery of immersive training lessons which can include hardware, peripherals such as haptic gloves, and ITS system sustainment, as specified in task orders. ITS provides the Air Force an end-toend solution, including all required equipment, if required, for each operator/maintainer/student to run the immersive training without the need for on-site technical support or hands-on instructor requirement. Each lesson in ITS shall cover a set of procedures that students can complete to achieve training requirements. 🧔

OUTREACH EVENTS

The Air Force SBIR/STTR Program participated in a variety of outreach and training efforts in FY2020. COVID-19 restrictions forced all events to be held virtually. The SBIR/STTR Program also supported a number of events related to SBIR/STTR activities, some of which are listed below.



Various Tech Warrior Ops Various Locations and Virtual

Tech Warrior OPS provides an opportunity for small businesses to gain early feedback from warfighters

and first responders. The Ops event is designed to place technologies in the hands of the actual user during training and exercise scenarios that simulate more rigorous operational use. This allows the user to provide highly-valuable objective and subjective feedback. It also provides small businesses with direct access to the operators for open discourse regarding potential solutions to any challenges encountered and accelerates the time it takes to formulate and execute solutions.

Various Pitch Days | Various Dates Various Locations and Virtual

Various Pitch Days that the DAF SBIR/STTR team supported included Space, AFLCMC, TEO, and Quantum.

Defense Innovation Symposium November 13 - 14, 2019 | Denver, CO

The Innovation and Opportunity Conference (IOC), put on by NASA, SBIR/STTR, Colorado Business Development Foundation (CBFD), and Colorado SBDC Techsource, brought together NASA and other government agencies, industry experts, small businesses, primes, and startups that are all interested in the expansion of tomorrow's aerospace and defense. Over 450 people were in attendance. The USAF SBIR STTR team participated in this event and conducted 18 One-On-One sessions.

AF Spark Collider and Pitch Bowl March 12, 2020 | Virtual

Brought together newly awarded SBIR Phase I companies with AF & Venture Capital stakeholders to facilitate collisions for solution exploration/project execution. The Pitch Bowl event featured the Strategic companies allowing them to showcase their work.

AFMC Digital Campaign Industry Exchange Day July 30 | Virtual

This event provided an overview of campaign goals and lines of effort to prepare for future of Air Force expects to conduct business.

SBIR Road Tours: Various Regions Various Dates | Virtual

The Rockies Road Tour (Aug. 10-14) was aimed at aiding small businesses based in Idaho, Utah, Montana, and Wyoming in government procurement with an emphasis on various SBIR/STTR programs. It is a national outreach effort connecting entrepreneurs working on advanced technologies to the country's largest source of early stage funding. The USAF SBIR/ STTR Communications team was able to secure 25 small businesses one-on-one meetings.

The Southeast Road Tour (Sep. 14-18) was aimed at aiding small businesses based in North Carolina, South Carolina, Georgia, and Virginia in government procurement with an emphasis on various SBIR/STTR programs. It is a national outreach effort connecting entrepreneurs working on advanced technologies to the country's largest source of early stage funding. The USAF SBIR/STTR Communications team was able to secure 54 small businesses one-on-one meetings.

STTR HBCU Collider at BDPACon2020 August 20-22 | Virtual

This event was to increase HBCU participation in the USAF SBIR/STTR program, connect HBCUs with emerging USAF trends, and establish strategic alliances with the USAF and HBCUs. William (Bill) Harrison and Joseph Gordon spoke at this event. Anissa Lumpkin was the lead on this event.

National Small Business Veterans Webinar Air Force SBIR/STTR Program Overview Sept 29 | Virtual

Description: Learn about the Air Force SBIR/ STTR program, recent changes in the application process and how to put your best foot forward when submitting your proposal. 🧔

INFORMATION SUPPORT



In May of 2020, the Air Force SBIR/STTR Program Office began using the Air Force SBIR/STTR One Help Desk to provide answers to questions about the program and to connect stakeholders with

appropriate Subject Matter Experts when necessary. Users could email questions to usaf.team@afsbirsttr. us or call (855) 855-5360. Prior to May 2020, program support staff were responsible for providing response and feedback to all queries.

In FY2020, inquiries on both the info line and email covered components of the program such as status requests on submitted proposals and debriefs, BAA and program awareness, website and technical support, and questions regarding contractual matters.

Prior to June 1, 2020, **602** total inquiries requested general SBIR information and proposal support, **221** requested support on proposal notifications and status of debriefs, **190** requested website and technical support, and **312** were related to contractual matters. **355** miscellaneous items requesting support not directly related to Air Force SBIR were also received.

In order to mitigate the more complex or technical questions, program support conducted extensive research, internal datamining, SBIR documentation referencing (instructions, policies, etc.), and POC coordination in order to provide optimal support.



SOCIAL MEDIA + WEBSITE

The Air Force SBIR/STTR Program used a number of social media channels to deliver compelling and relevant content to increase program awareness.



We used them to communicate SBIR/STTR developments related to policy or program changes; promote outreach activities, events, and other opportunities; solicit feedback from

program participants; and increase advocacy for the Air Force SBIR/STTR Program from key stakeholders.

Content was developed under one of two categories:

Shared Content: For Air Force SBIR/STTR, shared content encompassed relevant industry news. Google Alerts were set up to be received as they happen, and were directed to a general Air Force SBIR/STTR email account. At the start of, and periodically throughout each day, this email account was reviewed for any news items based on predetermined Google alert key phrases.

Planned Content: Our planned social media content was developed by the Air Force SBIR/STTR communications and marketing team to promote and communicate program activities,

upcoming events, and material that highlighted the program philosophy and mission. A weekly plan calendar was produced and approved that provided a posting schedule and the content for each post. The Planned Content goal was to ensure that relevant posts occurred on a daily basis to keep the Air Force SBIR/STTR Program at the forefront of the SBIR/STTR ecosystem.

Messaging and information that was shared via our social channels publicized and promoted previously approved materials or information that was already made public. For example, success story graphics were created using quotes and images that were already approved by Public Affairs.

As a result of our efforts, all of our social media channels saw an increase in usage and reach.

No money was spent on social media advertising in FY 2020.

WEBSITE

The Air Force SBIR/STTR website is the backbone of our communications efforts. It helps keep our audiences up to date with program news and events, and provides a single location for vital details that describe program initiatives, processes, required forms, and access to supporting resources.

Information is clearly displayed, easily digestible, and relevant to the SBIR/STTR mission and vision. The site has been designed to be responsive and easily

navigated on mobile devices, and optimized to load quickly on any device.

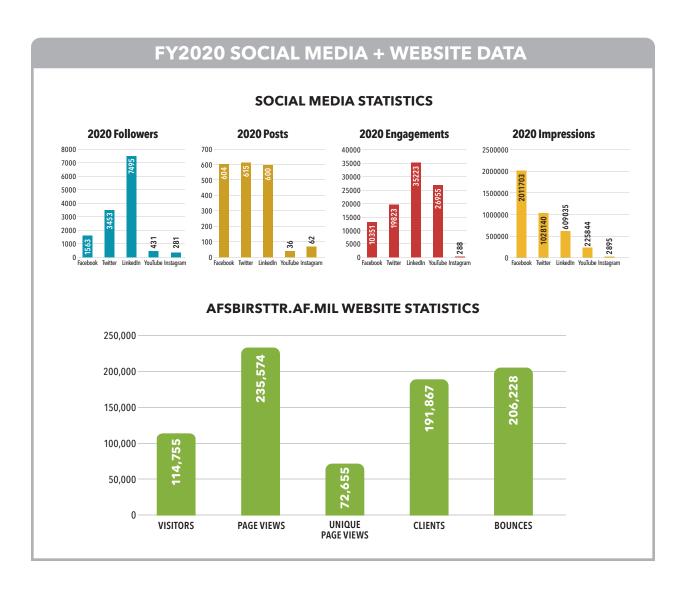
The Marketing and Communications team reviews the website to ensure material is as up-to-date as possible and coordinates with the IT group to update the site as needed. Every effort has been made to develop a constant flow of relevant content for the website.

Key features of the website include:

- Compliance with AFi 35-107 and other DoD and Air Force regulations as required
- Integration with the Defense Visual Information Distribution Service, DVIDS
- Program overview and details regarding leadership; Phase I, II, II+ (CRP), and Phase III

- processes; Broad Agency Announcements; Fraud, Waste, and Abuse Prevention; and events such as Air Force Pitch Days, Tech Warrior Enterprise efforts, Road Shows, and numerous other SBIR/STTR-related events
- News and information, including Success Stories, Digitally formatted fact sheets and publications, and relevant videos
- List of points of contact, a program support form, and a list of frequently asked questions

Visit the website at https://www.afsbirsttr.af.mil.





The Air Force SBIR/STTR Marketing and Communications team continued to produce videos to communicate small business successes within the SBIR/STTR program as well as program information vital to the small business community and our stakeholders.

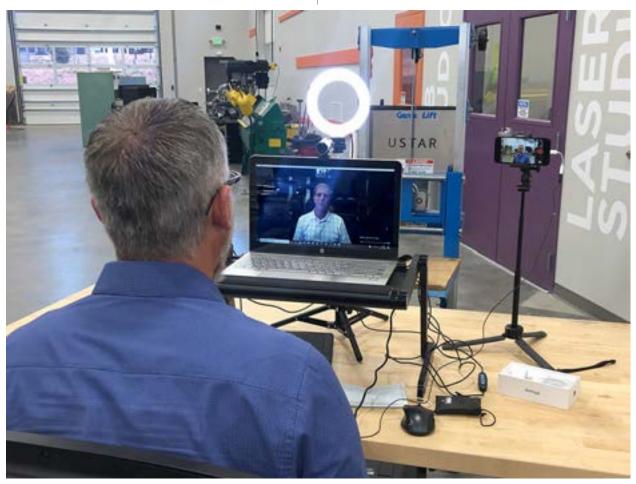


Our videos were available via three options: the Air Force SBIR/STTR website, YouTube, and DVIDS. With these three channels, there was a significant increase in viewership as well as subscribers.

At the onset of the 2020 corona virus pandemic, the Air Force heavily restricted air travel, impacting our video team's efforts to capture the successes of the Air Force SBIR/STTR program. To mitigate this issue and to continue meeting expectations, the video team developed a virtual video kit that was sent to

businesses and stakeholders to film their successes while recording the interview via the Zoom platform. The kit consists of an iPhone SE that captures video in 4k resolution, a tripod, a lavalier microphone, a ring light, and a laptop riser. A Success Story project showcasing NLign Analytics was the first to use the kit at Hill AFB with great success.

Our video production efforts for FY2020 are available on YouTube and DVIDS by searching on the words "Air Force SBIR/STTR," or by going to our website at https://www.afsbirsttr.af.mil/Media/Videos/.



Dennis Stewart (on screen) conducts a remote interview using the Remote Video Kit specifically developed for use during the COVID-19 mandated restrictions. Photo courtesy of NLign Analytics

COMMERCIALIZATION



Prior to 2020, The Air Force Small Business Innovation Research / Small Business Technology Transfer (SBIR/STTR) program had a strategic process that helped focus SBIR and STTR topics on high-priority technology needs in order to accelerate their transition to Phase III contracts and commercialization. Each year, the Air Force dedicated one percent of its SBIR/STTR budget toward its commercialization efforts.

In 2020, the Air Force SBIR/STTR **Commercialization Readiness Program was** discontinued. To replace the functions of the program, AFWERX began using the Strategic Funding Increase (STRATFI) and the Tactical Funding Increase (TACFI) approach.

Photo by Senior Airman Ryan Gomez



TECHNOLOGY TRANSITION

AFWERX, in collaboration with the Air Force Small Business Innovation Research/Small Business Technology Transfer Program, launched a competitive funding initiative in fiscal year 2020.



Prior to FY2020, the Air Force SBIR/STTR Program used the Commercialization Readiness Program (CRP) to bring together the stakeholders working with Air Force SBIR/STTR Portfolio Managers

(PMs) to help focus SBIR/STTR topics on high-priority technology needs. The PMs operated on-site at various Air Force bases supporting Air Force partners including PEOs, program offices, AFRL, among others. The PMs worked closely with these organizations to help implement the entire SBIR/STTR process, from topic generation to facilitating the transition of resulting technologies.

In addition, the PMs worked with small businesses, system program offices (SPOs), SBIR/STTR Program Managers, Technical Points of Contact (TPOCs), and industry technology integrators to identify and document the transition planning through non-binding SBIR/STTR Technology Transition Plans (STTPs) for high transition potential projects. These plans identified critical stakeholders, their roles and responsibilities, technology and manufacturing readiness levels, tasks and timing, funding sources, and risk mitigation to support SBIR/STTR technology transition.

In 2020, Air Force SBIR/STTR, incoordination with AFWERX and the AFVentures Division evolved CRP into what is now known as the Strategic Funding Increase, or STRATFI, progam to accellerate technology transition.

This program awards funding to small businesses for technologies previously contracted and funded through an Air Force SBIR Phase II. STRATFI can be applied not only to defense-specific technology, but also technology with military and commercial uses.

The funding mix varies. Defense-specific technology can be funded with SBIR money and other government funds. Dual-use technology financing, on the other hand, draws on a mix of SBIR cash combined with government funds and/or private investor capital.

The programs' purpose is to catalyze relationships between Air Force and Space Force end-users and acquisitions professionals, private-sector innovators, and investors. These programs also bridge the capability gap between current SBIR/STTR Phase II efforts and Phase III scaling efforts, facilitating delivery of strategic capabilities for the Department of the Air Force.

PROGRAM MATCHES SBIR, PRIVATE FUNDS

Through STRATFI, small businesses can receive between \$3 million and \$15 million in SBIR Phase IIB funds with a four-year performance period. TACFI, however, provides \$375,000 to \$1.7 million over a two-year period of performance.

Award sizes depend on waiver approvals from the Small Business Administration.

Air Force funds are combined with cash from private sources such as venture capital firms and "angel" investors. Companies would receive matching funding of either a.) \$2 in private investment for every \$1 in SBIR funds, or b.) \$2 dollars from non-SBIR government customers for every \$1 in SBIR funding.

An applicant must meet several eligibility criteria. This includes either having an active Air Force SBIR/STTR project in Phase II or must have completed one within the last three years. The subject also must not already have been awarded a Sequential Phase II contract and must meet minimum matching investment requirements.

STRATFI LAUNCHED IN MARCH 2020

Air Force officials unveiled STRATFI in March 2020 during the inaugural Pitch Bowl/Spark Collider event as part of AFVentures, one of AFWERX'S three branches. In March 2020, officials announced a combined award of nearly \$1 billion in contracts to more than 550 small businesses. This included roughly 20 SBIR Phase II companies, identified as potential STRATFI recipients who, combined, could receive more than \$500 million in financing.

As of January 2021, officials had awarded STRATFI contracts to 18 firms, many of them identified during the Pitch Bowl/Spark Collider. The inaugural round of STRATFI contracts totaled \$545 million. This included \$101 million in SBIR funds as well as \$102 million in matching funds from 31 government agencies. Sixtyseven private-sector entities will invest another \$342 million.

The average award for this first STRATFI round was \$5.6 million in SBIR funds, \$5.6 million in other government funds, and \$19 million in private cash, officials said.

STRATFI recipients for FY2020 include: Aerial Applications, Analytical Space, Anduril Industries, Applied Minds, Edgybees, Essentium, Falkonry, ICON Technology, MOJO, Merlin Labs, Orbital Insight, Orbital Sidekick, Pison, Privoro, Swarm Technologies, Virtualitics, Wickr and Wafer.

STRATFI was one of three approaches identified during the March event.

Air Force officials also announced AFVentures would award entry-level SBIR Phase I contracts of up to \$50,000. The contracts, dubbed "Small Bets," help new companies or ideas with potential Air Force and Space Force customers to explore technical feasibility.

In addition, AFVentures also would issue approximately 300 SBIR Phase II awards each year for companies that found potential customers for their technology. Contracts in this category, also called a "Product-Market Match," start at \$750,000 with the potential for further awards. Product-Market Match contracts are awarded after company executives make pitches in live or virtual Pitch Days.

The end user of technology funded through STRATFI must be at the strategic level-such as a major command, a direct reporting unit, a numbered Air Force, a field-operating agency or headquarters Air Force.



STRATFI **STATISTICS**

Firm Name	SBIR Funds	Non-SBIR Funds	Non-Federal Funds	Award Start Date
Robotic Services, Inc.	\$ 750,000.00	Phase III Awarded: \$ 9,000,000.00	\$1,500,000.00	21-Aug-20
Analytical Space, Inc.				
Anduril Industries, Inc	\$ 3,000,000.00	\$3,000,000.00	\$12,000,000.00	22-Jun-20
Apollo Flight Research, Inc.	\$ 800,000.00	\$800,000.00	\$3,499,137.77	1-Jun-20
Applied Minds, LLC	\$1,499,453.50	\$1,499,453.50	\$4,500,000.00	6-Jul-20
Edgy Bees, Inc.	\$ 400,000.00	\$400,000.00	\$1,410,198.00	1-Jul-20
Essentium, Inc.	\$4,400,000.00	Phase III Awarded: \$ 43,372,740.70	\$10,785,118.30	3-Sep-20
Falkonry, Inc.	\$1,500,000.00	\$2,600,000.00	\$4,625,000.00	29-Jul-20
ICON Technology, Inc.	\$7,250,000.00	\$7,300,000.00	\$14,550,000.00	22-Sep-20
Orbital Insight, Inc.	\$200,000.00	\$200,000.00	\$7,025,000.00	7-Aug-20
Orbital Sidekick, Inc.	\$1,000,000.00	\$3,000,000.00	\$2,000,000.00	22-Sep-20
Pison Technology	\$500,000.00	\$500,000.00	\$3,000,000.00	27-Aug-20
Privoro	\$1,334,000.00	\$750,000.00	\$584,000.00	29-Sep-20
Swarm Technologies, Inc.	\$1,500,000.00	\$1,500,000.00	\$6,000,000.00	8-Jun-20
Tectus Corporation	\$100,000.00	\$100,000.00	\$12,000,000.00	23-Jun-20
Virtualitics, Inc.	\$1,498,890.00	\$1,498,890.00	\$3,074,000.00	19-Jun-20
Wafer LLC	\$500,000.00	\$3,000,000.00	\$6,249,996.00	29-Jul-20
Joby Aero, Inc.	\$7,893,289.43	Verifying Non-SBIR Dollars	Verifying Outside Funding Sources	14-Jul-20
Beta Technologies, LLC	\$ 1,500,000.00	\$ 1,500,000.00	Verifying Outside Funding Sources	16-Jun-20

DATA MANAGEMENT

TOPICS + AWARDEES



Every year, participating federal agencies identify various R&D topics for small businesses under the Air Force Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program. Selected topics represent scientific and technical problems which need innovative solutions. These topics are grouped together into Broad Agency Announcements that are available to interested small businesses or FedBizOpps and the DoD SBIR/STTR websites.

Upon review of topics, a small business can choose which topics to pursue and then offer a proposal. The BAA letter contains all necessary information for submitting a proposal. Small businesses are encouraged to follow the instructions carefully, as proposals are received, reviewed and evaluated on a competitive basis by Air Force technical experts. These experts select the best proposals, awarding contracts to the most qualified small businesses with the most innovative proposal solutions.



OPEN TOPICS + PARTNERSHIPS

The Air Force SBIR/STTR Center for **Excellence continued experimenting** with special topics, open topics and focus areas in FY2020 as it refined and streamlined its strategy for finding, evaluating, and funding critical warfighting tools.



This experimentation sparked an evolution that resulted in the program using open topics and focus areas to acquire cutting-edge technology. The Air Force's desire to speed up technology

transition drove these changes.

Open topics allow small businesses to submit any technology that may have an Air Force application. Focus areas identify technologies of Air Force interest, such as additive manufacturing or simulator technology, without seeking solutions to particular problems. Major commands and program management offices (PMO) generate focus-area lists.

Starting in FY 2018, Air Force SBIR/STTR began including open and special topics in Broad Agency Announcement solicitations, which are issued three times per year. Open topics have succeeded in attracting hundreds of submissions, and resulted in dozens of contracts with small businesses.

Traditionally, SBIR had sought proposals by issuing specific topics based on a possible solutions to a particular problem. The Air Force Research Laboratory and others in the Air Force generated the SBIR topics.

Over the last three years, though, Air Force SBIR/STTR has restructured itself to function as a commercial seed fund. As part of this effort, the program introduced special topics as a way to reduce red tape and improve interactions between the Air Force, startups and small businesses.

Special topics always have included open topics, and the latter have proven extremely successful at attracting technology.

Even as topics evolved, the program began aligning Phase I contract recipients with AFWERX, the Air Force's Education and Training Command, the Defense Innovation Unit and National Security Innovation Network (formerly MD5). The role of these technology accelerators was to mentor and provide resources to Phase I companies. The goal of teaming SBIR recipients with accelerators is to better position these companies to compete for Phase II contracts.

BROAD AGENCY ANNOUNCEMENTS

The 20.1 Broad Agency Announcement included four topics and four pitch days. Topics included Flight Test Playback Tool, Interactive Multi-media Instruction Decision Tool for Aircraft Maintenance, Airborne Radio Sustainment Modernization, Development of Efficient Thermal Spray Coupon Metallurgical Laboratory Processing, and Mission Design for the New Space Environment. The 20.A BAA included four Pitch Day topics covering Quantum Enabling Technologies Quantum Timing, Quantum Sensing, Quantum Information Processing and Computing, and Quantum Communication and Networking.

The Air Force did not participate in BAA solicitation 20.2 or 20.B. However, the Air Force did issue out-of-cycle solicitations. X20.1 offered to Open Topics: Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need; and Direct to Phase II Open Topic: Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need. X20.A presented one Open Topic titled Open Call for Science and Technology Created by Early-Stage, e.g., University, Teams.

BAA 20.3 focused solely on a Weapons Pitch Day. X20.3 released seven topics covering Direct to Phase II Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need, Simulator Pitch Day 2020 Projects for Lightweight or Modular Simulators, Digital Engineering Pitch Day, Industry Technologies Advancing Materials and Manufacturing Processes for Attritable Structures, Engines, and Sensors of Autonomous Unmanned Aerial Systems and Space Systems, Phase I Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear AF Stakeholder Need, Space and Missile Systems Center (SMC) Pitch Day, and AF Life Cycle Management Center Rapid Sustainment Office (AFLCMC/RSO) Pitch Day.

Additional out-of-cycle solicitations included X20.C for Phase I Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions, X20.D for Phase I Open Topic supporting Agility Prime: Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions, and X20.R for Phase I Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions.

OPEN TOPICS

Open topics differ from SBIR/STTR'S traditional approach to finding technology solutions. First, open topics are open to all solutions rather than focusing on one specific problem area. Thus, the companies who have been awarded a Phase I contracts represent a diverse set of problems and solutions.

A second major difference is the number of awards given under this new construct. A typical SBIR topic gives two or three Phase I awards. Open topic awards, on the other hand, can generate hundreds of Phase I contracts, which further broadens the potential set of solutions.

Yet another major difference from a typical SBIR topic is the research being completed is to perform a feasibility study for adapting a non-defense commercial technology to meet specific Air Force needs. A major part of this feasibility study is finding a specific Air Force end user/customer and determining how their needs could be met by an adapted commercial solution.

While all companies entering Phase I have a notional understanding of a potential Air Force user, most will actively search out additional Air Force contracts in an attempt to find the best product/and Air Force market for their solution.

What this means in practice is that these companies will be reaching out to many people in the Air Force, attempting to find the right person whose problems can be addressed by a company's particular solution.

SUMMARY

The advent of open topics was part of the program's larger evolution that also has included special topics as well as partnerships with technology accelerators.

The Air Force SBIR/STTR program first began allocating resources toward special topics during the 18.2 Spring Broad Agency Announcement. Special topics were intended to reduce the barriers for small businesses and leverage new methods of doing business. They also allowed the program to act more as a commercial seed fund.

Among the differences from traditional SBIR/STTR proposals, the open topics involved:

- An application process that requires a five-page technical paper and a 15-slide "pitch deck," instead of the traditional 20-page technical proposal
- Phase I contract awards of varying amounts (\$50K to \$158K) and a three-month period of performance, compared to the standard \$150,000 award and nine-month period of performance
- Numerous awards for each Phase I, which are typically limited to only a few awards

The six special topics introduced in the 2018 18.2 BAA were just the first step in a larger pilot project. During subsequent BAAs, the number of topics grew as the Air Force continued to experiment with ways to drive benefits for both small businesses and the warfighter.

Open- topics were made possible through partnerships with such innovative organizations as AFWERX, the Air Force Research Laboratory and the Office of the Secretary of Defense's National Security Innovation Network (formerly MD5).



SBIR/STTR BUDGETS

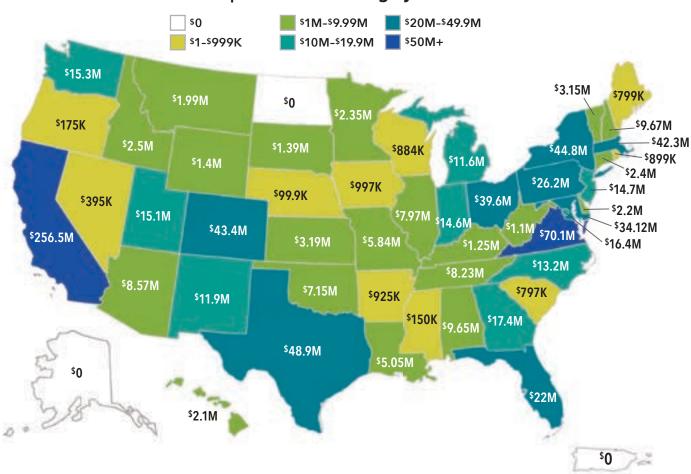
FY20 AIR FORCE SBIR BUDGET

	BUDGET	TOPICS	PROPOSALS	SBIR PH I AWARDS	SBIR PH II AWARDS
FY 2017	\$357,458,934	157	1,926	267	209
FY 2018	\$542,849,828	218	3,534	358	224
FY 2019	\$697,548,747	198	4,721	1,211	451
FY 2020	\$775,519,336	17	4,788	819	617

FY20 AIR FORCE STTR BUDGET

	BUDGET	TOPICS	PROPOSALS	STTR PH I AWARDS	STTR PH II AWARDS
FY 2017	\$50,111,066	38	267	56	30
FY 2018	\$81,597,172	37	316	50	33
FY 2019	\$97,792,253	45	458	121	52
FY 2020	\$108,717,664	6	405	153	102

SBIR|STTR FY20 Funding by State



SBIR **20.1 TOPICS**

The following Air Force topics were released during the SBIR 20.1 BAA.

TOPIC NUMBER	TOPIC TITLE
AF201-001	Flight Test Playback Tool
AF201-D001	Interactive Multimedia Instruction Decision Tool for Aircraft Maintenance
AF201-D002	Airborne Radio Sustainment Modernization
AF201-D003	Development of Efficient Thermal Spray Coupon Metallurgical Laboratory Processing
AF201-D004	Mission Design for the New Space Environment



STTR 20.A TOPICS

The following Air Force topics were released during the SBIR 20.A BAA.

TOPIC NUMBER	TOPIC TITLE
AF20A-T001	Pitch Day for Quantum Enabling Technologies Quantum Timing
AF20A-T002	Pitch Day for Quantum Enabling Technologies Quantum Sensing
AF20A-T003	Pitch Day for Quantum Enabling Technologies Quantum Information Processing and Computing
AF20A-T004	Pitch Day for Quantum Enabling Technologies Quantum Communication and Networking



SBIR X20.1 TOPICS

The following Air Force topics were released during the SBIR X20.1 special solicitation

TOPIC NUMBER	TOPIC TITLE
J201-CSO1	Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need
AF201-DCSO1	Direct to Phase II Open Topic: Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need



STTR X20.A TOPIC

The following Air Force topic was released during the SBIR X20.A special solicitation

TOPIC NUMBER	TOPIC TITLE
AF20A-TCSO1	Open Call for Science and Technology Created by Early-Stage, e.g., University, Teams

SBIR 20.3 TOPIC

The following Air Force topic was released during the SBIR 20.3 BAA.

TOPIC NUMBER TOPIC TITLE

AF203-001 Weapons Pitch Day



SBIR X20.3 TOPICS

The following Air Force topics were released during the SBIR X20.3 special solicitation

TOPIC NUMBER	TOPIC TITLE
AF203-DCSO1	Direct to Phase II Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear Air Force Stakeholder Need
AF203-DCSO2	Simulator Pitch Day 2020 Projects for Lightweight or Modular Simulators
AF203-DCSO3	Digital Engineering Pitch Day
AF203-DCSO4	Industry Technologies Advancing Materials and Manufacturing Processes for Attritable Structures, Engines, and Sensors of Autonomous Unmanned Aerial Systems and Space Systems
AF203-CSO1	Phase I Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions with a Clear AF Stakeholder Need
AF203-CSO2	Space and Missile Systems Center (SMC) Pitch Day
AF203-CSO3	AF Life Cycle Management Center Rapid Sustainment Office (AFLCMC/RSO) Pitch Day



STTR X20.C TOPIC

The following Air Force topic was released during the STTR X20.C special solicitation

TOPIC NUMBER TOPIC TITLE

AF20C-TSO1 Phase I Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions



SBIR X20.R TOPIC

The following Air Force topic was released during the SBIR X20.R special solicitation

TOPIC NUMBER TOPIC TITLE

AF20R-DCSO1 Phase I Open Call for Innovative Defense-Related Dual-Purpose Technologies/Solutions



SBIR X20.D TOPIC

The following Air Force topic was released during the SBIR X20.D special solicitation

TOPIC NUMBER	TOPIC TITLE
AFX20.D-CSO1	Phase I Open Topic supporting Agility Prime: Open Call for Innovative Defense-Related
	Dual-Purpose Technologies/Solutions

TOPIC AWARD SELECTEES SBIR PHASE I

The following small businesses were selected for Phase I, II or III contracts during FY 2020 (Note: this list may not be complete). The awards' associated topics could have come from several solicitations. However, a selection for an award does not guarantee the business won the final contract. (Other issues may come into play, such as meeting accounting standards, that might prevent a selectee from receiving the final contract.)

FIRM	CITY	ST
(ES3) Engineering & Software System Solution, Inc.	San Diego	CA
0 Base Design, LLC	Wake Forest	NC
1Huddle	New York	NY
3AM Innovations	Buffalo	NY
3D Control Systems, Inc.	San Francisco	CA
451 Tech LLC	Lexington	KY
4empowerment.com, Inc.	Austin	TX
ABL Space Systems	El Segundo	CA
AC Global Risk	Napa	CA
Accessworks Corp (dba Techsphere)	San Diego	CA
Accion Systems	Boston	MA
Acellent Technologies, Inc.	Sunnyvale	CA
Aceso Plasma, LLC	Virginia Beach	VA
Acuitus	Sunnyvale	CA
ADA Technologies, Inc.	Littleton	СО
Adaptive Systems LLC	Colorado Springs	СО
Addx Corporation	Alexandria	VA
Adelos, Inc.	Polson	MT
Adroit Materials	Apex	NC
Advanced Scientific Concepts, LLC	Santa Barbara	CA
Advanced Simulation Technology, Inc.	Herndon	VA
Advanced Space, LLC	Boulder	СО
Advanced Unmanned Systems LLC	Apison	TN
Adyptation LLC	Springboro	ОН
Aeromarine Consulting, Inc.	Brandon	FL
Aeronix, Inc.	Melbourne	FL

FIRM	CITY	ST
Aesthetic Integration Research Corporation	Austin	TX
Agile Data Decisions LLC	Pearland	TX
Agolo	New York	NY
Ahmic Aerospace LLC	Dayton	ОН
Al.Reverie, Inc.	New York	NY
Air Armor Tech	Ft Worth	TX
Air Logistics and Engineering Solutions	Warner Robins	GA
Airborne Outfitters, LLC	Centerville	ОН
Airmap, Inc.	Santa Monica	CA
All Vision Intelligence	Arlington	VA
Alpha Drive, Inc.	Brooklyn	NY
Alpha Recon	Colorado Springs	СО
Alpha-1 Aerospace, LLC	Mary Esther	FL
AlphaBravo	North Bethesda	MD
alYnmnt Dev I, Inc.	Irvine	CA
American Ecotech, LLC	Warren	RI
AmpHP, Inc.	Park City	UT
Anchore, Inc.	Santa Barbara	CA
Anduril Industries, Inc.	Irvine	CA
Anno.Ai, Inc.	Reston	VA
Apollo Fusion, Inc.	Mountain View	CA
Applied Dynamics International	Ann Arbor	MI
Applied Radar, Inc.	North Kingstown	RI
Applied Signals Intelligence	Sterling	VA
ArcByt, Inc.	Berkeley	CA
Archarithms, Inc.	Huntsville	AL
Arctan, Inc.	Arlington	VA

FIRM	CITY	ST
Arena Labs, Inc.	San Clemente	CA
Ares Materials, Inc.	Plano	TX
ARES Security Corporation	Burlingame	CA
Arkham Technology Ltd.	Irvine	CA
Armaments Research Company, Inc.	Bethesda	MD
Armored Things, Inc.	Boston	MA
ARP Networks, Inc.	Los Angeles	CA
Ascend Integrated Technology Solutions, Inc.	Bel Air	MD
Assetas	Denver	СО
Assurance Technology Corporation	Carlisle	MA
Assured Information Security, Inc.	Rome	NY
Astranis Space Technologies Corp.	San Francisco	CA
Astro Digital US, Inc.	Santa Clara	CA
Asylon, Inc.	Philadelphia	PA
Asymmetric Technologies LLC	Columbus	ОН
ATC - NY	Trumansburg	NY
Athena Security, Inc.	Austin	TX
Atlas Devices	Boston	MA
ATLAS Space Operations, Inc.	Traverse City	MI
Atomos Nuclear and Space Corporation	Denver	СО
Atomus Corporation	Los Angeles	CA
Attollo Engineering LLC	Camarillo	CA
Augmented Training Systems	Austin	TX
Augmentir, Inc.	Horsham	PA
Autonodyne LLC	Boston	MA
Aviation Resources and Consulting Services, LLC (ARCS)	Cookeville	TN
Aviation Safety Resources, Inc.	Nicholasville	KY
Avisare	Los Angeles	CA
Awake Security, Inc.	Santa Clara	CA
Axle Box Innovations, LLC	College Station	TX
BadVR, Inc.	Marina Del Re	CA

FIRM	CITY	ST
Barn Owl Tech, Inc.	Colorado Springs	со
Bastille Networks, Inc.	Santa Cruz	CA
Battle Born Supply Co.	Paradise Valley	NV
BCL Technologies	San Jose	СА
Beagle Learning, Inc.	Boston	MA
Beta Technologies, LLC	South Burlington	VT
Bettermeant, Inc.	Berkeley	CA
Bevilacqua Research Corporation	Huntsville	AL
Bigml, Inc.	Corvallis	OR
BILT, Inc.	Grapevine	TX
BlazeTech Corp.	Woburn	MA
Blingby LLC	New York	NY
Blockchain Resources Group, LLC	North Charleston	SC
Bloomlife, Inc.	San Francisco	СА
Blue Eye Soft Corp	Greer	SC
Blue Startups	Honolulu	HI
BlueQuartz Software, LLC	Springboro	ОН
BlueRISC, Inc.	Amherst	MA
Boecore, Inc.	Colorado Springs	СО
Bonafi, Inc.	Chatsworth	CA
Boost Treadmills LLC	Palo Alto	CA
Boston Engineering Corporation	Waltham	MA
Boston Materials, Inc.	Bedford	MA
BotFactory, Inc.	Long Island City	NY
Boxboat Technologies, LLC	Bethesda	MD
Bra-Ket Science	Austin	TX
Bracket f, Inc.	Elkridge	MD
Brightline Interactive	Alexandria	VA
Bryant Alliance, LLC	Santa Rosa Beach	FL
Bubo Learning Design	Plano	TX
Bulzi Media, Inc.	Newport Beach	CA
Busek Co., Inc.	Natick	MA
C360 Technologies, Inc.	Wexford	PA
Calypso Al	San Mateo	СА

FIRM	CITY	ST
Capital Factory Properties, LLC	Austin	TX
CarbonCycle, LLC	Mansfield	МО
CareTribe, Inc.	Palo Alto	CA
Castland Productions	Colorado Springs	СО
Centil	Boulder	СО
Cerebras Systems, Inc.	Los Altos	CA
CesiumAstro, Inc.	Austin	TX
CFD Research Corporation	Huntsville	AL
Chandler Automated Systems LLC DBA Vigilant Technologies	Tempe	AZ
Channel Logistics LLC	Camden	NJ
Chapiro, Michael DBA: Black Lattice	Seattle	WA
Charles River Analytics, Inc.	Cambridge	MA
Chesapeake Technology International Corporation	California	MD
Cigent Technology	Ft Myers	FL
Cipher Skin, Inc.	Wheat Ridge	СО
Citrusbyte, LLC	Encino	CA
City Labs, Inc.	Homestead	FL
CivicFeed, Inc. dba PeakMetrics	Los Angeles	CA
CK Technologies	Santa Rosa Beach	FL
ClaimDetect LLC	Fort Myers	FL
Clarifai, Inc.	New York	NY
CleanNG LLC d/b/a Infinite Composites Technologies	Tulsa	ОК
Clearview Al	New York	NY
CloudCover	Burnsville	MN
Cloverleaf.me, Inc.	Cincinnati	ОН
CoAspire, LLC	Fairfax	VA
Cobalt Solutions, Inc.	Austin	TX
Coder	Austin	TX
Cognitive Space, Inc.	Manvel	TX
Colvin Run Networks, Inc.	Leesburg	VA
Compellon, Inc.	Laguna Hills	CA
Computer Technology Associates, Inc.	Ridgecrest	CA

FIRM	CITY	ST
Conectric Networks, LLC	San Diego	CA
Confluera, Inc.	Palo Alto	CA
Consensus Networks	South Bend	IN
Contact Control Interfaces, LLC	Cincinnati	ОН
Contract Cloud, Inc.	Roscoe	IL
Contrast Security, Inc.	Los Altos	CA
Core Parts LLC	Mesa	AZ
CoreSyte, Inc.	Ashburn	VA
Cornerstone Research Group, Inc.	Miamisburg	ОН
Corrdesa	Tyrone	GA
Corsair Technical Services, Inc.	Bellevue	WA
CoVar Applied Technologies, Inc.	Mclean	VA
Creare LLC	Hanover	NH
Creative MicroSystems Corp.	Waitsfield	VT
CreativeC LLC	Albuquerque	NM
Cross Domain Systems, Inc.	Medford	MA
CrowdAI	Mountain View	CA
Cruze Distribution	Lincoln	NE
Cuberg, Inc.	Emeryville	CA
Cyber COAST LLC	Arlington	VA
CyOne, Inc.	Aberdeen	MD
CYVA Research Corporation	San Diego	CA
Danbury Enterprises LLC	Arlington	VA
Daniel H. Wagner, Associates, Inc.	Exton	PA
Data Fusion & Neural Networks, LLC	Arvada	СО
DAtAnchor	Columbus	ОН
Daxor Corporation	Oak Ridge	TN
Decipher Technology Studios LLC	Alexandria	VA
Decision Lens, Inc.	Arlington	VA
Decisive Point	Cold Spring	KS
DeepBits Technology LLC	Riverside	CA
DeepHealth, Inc.	Belmont	MA
Defendry, LLC	Scottsdale	AZ

	CITY .	6
FIRM	CITY	ST
Defense Engineering Corporation	Beavercreek	OH
Denim Group, LTD	San Antonio	TX
Dephy, Inc.	Maynard	MA
Descartes Labs, Inc.	Santa Fe	NM
Design Interactive, Inc.	Orlando	FL
Digital Solid State Propulsion, Inc.	Reno	NV
Direct Kinetic Solutions LLC	El Paso	TX
Discovery Machine, Inc.	Williamsport	PA
DittoLive, Inc.	San Francisco	CA
Diversified 3D Technologies DBA Exiom	Monticello	FL
DLS Engineering Associates, Inc.	Virginia Beach	VA
DMAero, LLC	Byron	GA
Dominion Microprobes, Inc.	Charlottesville	VA
Dream Systems, LLC	Roseville,	CA
DS2	Niceville	FL
dx3Tech LLC	Austin	TX
Dynepic, Inc.	Charleston	SC
Eagle Harbor Technologies	Seattle	WA
Easy Aerial, Inc.	Brooklyn	NY
Eclypses, Inc.	Colorado Springs	СО
Edge Case Research, Inc.	Pittsburgh	PA
Edgetide LLC	Columbia	MD
Egnyte, Inc.	Mountain View	CA
EIC Laboratories, Inc.	Norwood	MA
Eiden Systems Corporation	Charlottesville	WA
Elder Tree	Alhambra	CA
Elemeno Health	Oakland	CA
Elevan LLC	San Antonio	TX
Elysian Labs, Inc.	Oakland	CA
Empower Equity, Inc. (EMPEQ)	Ithaca	NY
Encrypted Sensors	Midlothian	VA
Energy Alliance Technology Corp	Sherman Oaks	CA

FIRM	CITY	СТ
FIRM	CITY	ST
Engin-IC, Inc.	Plano	TX
Engineer.ai CORP	Los Angeles	CA
Engineering Software Research & Development, Inc.	St. Louis	MO
Enview	San Francisco	CA
ERG Aerospace Corporation	Oakland	CA
esc Aerospace US, Inc.	Orlando	FL
ESS Tech, Inc.	Wilsonville	OR
Etegent Technologies, Ltd.	Cincinnati	ОН
Exabyte, Inc.	San Francisco	СО
ExoAnalytic Solutions, Inc.	Foothill Ranch	VA
EXOS Aerospace Systems & Technologies, Inc.	Greeenville	TX
Exosphere Fitness, LLC	Granbury	TX
Exoterra Resource LLC	Littleton	СО
Expedition Technology, Inc.	Herndon	VA
Fabric8Labs, Inc.	Berkeley	CA
Fabricated Software, Inc.	Cedar Grove	NJ
Family Proud, Inc.	San Diego	CA
Fantasmo Studios, Inc.	Santa Monica	CA
Fantasy Journalist, Inc. d/b/a infoSentience	Bloomington	IN
FastCAP Systems Corporation	Boston	MA
FASTPORT, Inc.	Lowell	MA
Figur8, Inc.	Boston	MA
Figure, Inc. d/b/a Figure Engineering	Lorton	VA
FireHUD, Inc.	Norcorss	GA
First Line Furniture LLC	House Springs	МО
Flawless Photonics	Mountain View	CA
Flightware, Inc.	Guilford	СТ
Flipper, Inc.	Albany	CA
FLITE Material Sciences US, Inc.	Somervile	MA
Fluent LLC	Denver	NY
Fluree PBC	Winston Salem	NC
Fly Vekter, LLC	Ellenwood	GA
FocusMotion Health	Santa Monica	CA

FIRM	CITY	ST
Formalloy Technologies, Inc.	Spring Valley	СА
Fox and Geese LLC	Portland	OR
Fraym, Inc.	Mclean	VA
Friedman Research Corporation	Austin	TX
Frontline Support Solutions, LLC	San Antonio	TX
Futura Cyber, Inc.	Dedham	MA
FX192-SO1-0476	Pinehurst	NC
Galvanize, Inc.	Denver	СО
Gantz-Mountain Intelligence Automation Systems,Inc	Monterey	CA
General Radar Corp	Menlo Park	CA
Genesis Dimensions LLC	Houston	TX
Geopipe, Inc.	New York	NY
Geosite, Inc.	Stanford	CA
GigSky, Inc.	Palo Alto	CA
Gigster, Inc.	San Francisco	CA
GIGXR, Inc.	Venice	CA
Giner, Inc.	Newton	MA
GLC Technologies, Inc.	Owens Cross Roads	AL
Global Circuit Innovations, Inc.	Colorado Springs	СО
GlobalSim, Inc.	Sandy	UT
GMTM, Inc.	Winter Park	FL
GoHypersonic, Inc.	Dayton	ОН
Golden Recursion, Inc	San Francisco	CA
GonioTech LLC	Columbus	ОН
GoPlug Bags, Inc	Provo	UT
Grafana Labs	New York	NY
Granite Mountain Industries LLC	South Portland	ME
Gravitational, Inc.	Oakland	CA
GREEN MAGIC HOMES, Inc.	Aventura	FL
Green Revolution Cooling	Austin	TX
Greetly, Inc.	Denver	СО
Greg	Ventura	CA
GRID RASTER, Inc.	Mountain View	СА

FIRM	CITY	ST
Ground Star LLC	Crossville	TN
Group EM3, Inc.	Pompton Plains	NJ
Growth Engine, Inc.	Houston	TX
Gryphn Corporation (DBA: ArmorText)	Boyds	MD
Grypmat, Inc.	Columbus	ОН
Gyrene Engineer Mangement	New Baltimore	MI
Gyro-Stabilized Systems, LLC	Nevada City	CA
Hadron Industries, Inc.	Cambridge	MA
Hashlit, Inc. d/b/a Corsha	Vienna	VA
Hatchbed, LLC	San Antonio	TX
Havik Corporation	San Diego	CA
HealthStar Informatics	Reston	VA
Heila Technologies, Inc.	Somerville	MA
Hemotek, LLC	Plano	TX
HeroWear, LLC	Nashville	TN
Highland Cyber Strategies LLC	Knoxville	MD
HookBang, LLC	Austin	TX
HTX Labs, LLC	Houston	TX
Huckworthy	Washington	DC
Human Systems Integration	Walpole	MA
Hybrid Communications, Inc.	Lenexa	KS
HydraMetrics	Hugo	MN
Hypergiant Galactic Systems, Inc.	Austin	TX
Hyperion Technology Group, Inc.	Tupelo	MS
Hypothermia Devices, Inc.	Inglewood	CA
IBC Materials & Technologies	Lebanon	IN
iCrypto, Inc.	Las Vegas	NV
ICX Media, Inc.	Washington	DC
IERUS Technologies, Inc.	Huntsville	AL
Illumination Works, LLC	Beavercreek	ОН
IMETALX Group, LLC	San Francisco	CA
Immersive Wisdom, Inc.	Boca Raton	FL
Impossible Aerospace Corporation	Santa Clara	CA

FIRM	CITY	ST
Improve Group	Albuquerque	NM
IMSAR LLC	Springville	UT
In8development, Inc.	Newman Lake	WA
Indigovern LLC.	Washington	DC
InfiniteTactics, LLC	Beavercreek	ОН
Inflowlogistics, LLC	San Antonio	TX
InfoBeyond Technology LLC	Louisville	KY
Information Systems Laboratories, Inc.	Poway	CA
InFront Compliance, Inc.	Orlando	FL
INK DIGITAL TECHNOLOGIES CORPORATION	Costa Mesa	CA
Innosek	Tonawanda	NY
InnoSys	Salt Lake City	UT
Innovative Rocket Technologies, Inc.	New Hyde Park	NY
Innovative Scientific Solutions, Inc.	Dayton	ОН
IntelliEPI IR, Inc.	Richardson	TX
Intelligent Artifacts, Inc.	New York	NY
Intelligent Automation, Inc.	Rockville	MD
Intelligent Fiber Optic Systems Corporation	San Jose	CA
Intelligent Optical Systems, Inc.	Torrance	CA
Intellisense Systems	Torrance	CA
Interdisciplinary Consulting Corporation	Gainesville	FL
Interlog Corporation	Anaheim	CA
Intrinsic Enterprises, Inc.	Newcastle	WA
Introspective Power, Inc.	Broomfield	СО
Invictus Health, Inc.	Denver	CA
Iris Technology Corporation	Irvine	CA
IT Cadre, LLC	Ashburn	VA
Jasper Solutions, Inc.	Huntington Station	NY
Jaxon, Inc.	Boston	MA
JETCOOL Technologies, Inc.	Littleton	MA
Jove Sciences, Inc.	San Clemente	СА

FIRM	CITY	ST
JoyLab	Denver	СО
Judd Systems Technologies, LLC	Rockwall	TX
Kaney Aerospace	Rockford	IL
Kayhan Space Corp	Lafayette	СО
KEF Robotics, Inc.	Pittsburgh	PA
Kennon Products, Inc.	Sheridan	WY
Kerberos International, Inc.	Temple	TX
Keystone Synergistic Enterprises, LLC	Port Saint Lucie	FL
Kheiron Immersive Training Environments, LLC	Lafayette	LA
Kilmarnock International LLC	Arlington	VA
Kinnami Software Corporation	Braintree	MA
Kitware	Clifton Park	NY
Knowledge Based Systems, Inc.	College Station	TX
Knowmadics, Inc.	Herndon	VA
Kodiak Robotics, Inc.	Mountain View	CA
Korb Satellite Systems LLC	Rockville	MD
Kubos Corporation	Denton	TX
KULR Technology Corporation	San Diego	CA
Kumu Networks, Inc.	Sunnyvale	CA
Kyma Technologies, Inc.	Raleigh	NC
Labelbox, Inc.	San Fransisco	CA
Language Computer Corporation	Richardson	TX
Lay-n-Go, LLC	Alexandria	VA
Level One Accountability	Woodbury	TN
LGarde, Inc.	Tustin	CA
Liberty Dynamic	Colorado Springs	СО
LIFT Aircraft, Inc.	Austin	TX
Linear Labs, Inc.	Fort Worth	TX
Linearizer Technology Gov	Hamilton	NJ
Link to Learn LLC	Link To Learn Llc	СО
Linshom Management LLC	Ellicott City	MD
Lito, Corp.	Las Vegas	NV
LiveSafe, Inc.	Arlington	VA

FIRM	CITY	ST
Locoal Charcoal Company LLC	Del Valle	TX
Loft Orbital Solutions, Inc.	San Francisco	CA
LSP Technologies, Inc.	Dublin	ОН
Lumena, Inc.	Denver	СО
Lumineye, Inc.	Boise	ID
Luna Innovations, Inc.	Roanoke	VA
Lunar Outpost, Inc.	Boulder	СО
Lunar Resources, Inc.	Houston	TX
Lynntech, Inc.	College Station	TX
LynQ Technologies, Inc.	Brooklyn	NY
M4 Engineering, Inc.	Long Beach	CA
Macro-Eyes, Inc.	Fall City	WA
Mad Apparel, Inc.	Redwood City	CA
Made In Space, Inc.	Jacksonville	CA
MagicCo LLC	Brooklyn	NY
Mallinda, Inc.	Aurora	СО
Management Sciences, Inc.	Albuquerque	NM
Mantiscan LLC	Lafayette	LA
MARi, LLC	Alexandria	VA
Masten Space Systems, Inc.	Mojave	CA
Matbock, LLC	Virginia Beach	VA
Materialize, Inc.	Brooklyn	NY
Materials Technologies Corporation	Monroe	GA
Matrix Games LLC	Bellvue	WA
Matroid, Inc.	Palo Alto	CA
Max Powers, LLC	Brooklyn	NY
MaXentric Technologies LLC	Fort Lee	NJ
McQ, Inc.	Fredericksburg	VA
ME Biosciences, Inc.	Boulder	СО
Memcomputng, Inc.	San Diego	CA
MetroLaser, Inc.	Laguna Hills	CA
METSS Corporation	Westerville	ОН
MFB Fertility	Erie	СО
MicroLink Devices	Niles	IL
microsurgeonbot, Inc.	Sylmar	CA

FIRM	CITY	ST
Mile One LLC	Colorado Springs	MD
Military Crashpad, Inc.	Converse	TX
Misram LLC	Holmdel	NJ
Mobile Coordination, Inc.	New York	NY
Mobodyne	Provo	UT
Mocana Corporation	Sunnyvale	СА
Modula S, Inc.	Sun Valley	ID
Molecula Corp.	Austin	TX
Momentus, Inc.	Santa Clara	CA
Montuno Software, LLC	Brambleton	VA
Moonlighting, Inc.	Glen Allen	VA
Mosaic Microsystems LLC	Rochester	NY
Motusi Corporation	Clackamas	OR
MX3 Diagnostics, Inc.	Austin	TX
myLAB Box, Inc.	Los Angeles	CA
Nakamoto Terminal LLC	Washington	DC
NanoAl LLC	Skokie	IL
Nanodropper, LLC	Seattle	WA
Nanofiber Solutions	Hilliard	ОН
Near Earth Autonomy	Pittsburgh	PA
NearSpace Launch, Inc.	Upland	IN
Neil Fineman	Las Vegas	NV
Netography, Inc.	Truckee	CA
NeuroFlow, Inc.	Philadelphia	PA
Neurovation Labs, Inc.	New York	NY
New Eagle Consulting LLC	Ann Arbor	MI
NewSoTech, Inc.	Ashburn	VA
NexTech Solutions LLC	Orange Park	FL
NextGen Balancing Technologies, LLC	Morrisville	VT
nFlux, Inc.	Los Angeles	СА
NIRSense	Richmond	VA
Novaa Ltd	Dublin	ОН
NOVI LLC	Arlington	VA
Novo Navis Aerospace Operations LLC	Sun City	AZ

FIRM	CITY	ST
Novo Space, Co.	Cambridge	MA
Nueon, Inc.	Menlo Park	CA
Numerica Corporation	Fort Collins	СО
NXTek, LLC	Costa Mesa	CA
O'Neil & Associates, Inc.	Miamisburg	ОН
Observr, Inc.	San Mateo	CA
Octarine Labs, Inc.	Sunnyvale	CA
Oddball, Inc.	Washington	CA
Off-World, Inc.	Pasadena	CA
Olifant Medical, Inc.	San Antonio	TX
OM Group, Inc.	Piscataway	NJ
Omelas, Inc.	Washington	DC
Open X Education, Inc.	Signal Hill	CA
Opterus Research and Development, Inc.	Loveland	СО
Optimum Technologies LLC	Leesburg	VA
Optomec, Inc.	Albuquerque	NM
optoXense, Inc.	San Ramon	CA
OptTek Systems, Inc.	Boulder	СО
Opus 12, Inc.	Berkeley	CA
Oralome, Inc.	Palo Alto	CA
Orbion Space Technology	Houghton	MI
Orbit Fab	Santa Clara	CA
Orbital Traction, Ltd.	Houston	TX
Orions Systems, Inc.	Snoqualmie	WA
Otolith Sound, Inc.	Washington	DC
ouraring, Inc.	San Francisco	CA
Outdoor Survival LLC	Babylon	NY
Outerlink Corporation	Concord	MA
Outpatient, Inc.	Danville	CA
Outside Analytics, Inc.	Broomfield	СО
oVio Technologies, Inc.	Newport Beach	CA
P3 Technologies	Jupiter	СТ
Pacific Engineering, Inc.	Roca	NE
Pacific Microchip Corp.	Culver City	CA

FIRM	CITY	ST
Parabilis Space Technologies, Inc.	San Marcos	СА
Parabol, Inc.	Alhambra	CA
Paragon Robotics LLC	Bedford Heights	ОН
PARASANTI LLC	Dallas	TX
Pathfinder Solutions Group LLC	Wilton	СТ
Pathwaves, Inc.	Miami	FL
Peak Performance Leadership, LLC	Killingworth	СТ
Perceptronics Solutions, Inc.	Sherman Oaks	СА
Perfect Point EDM Corporation	Huntington Beach	CA
Persistent Systems, LLC	New York	NY
Phase Four, Inc.	El Segundo	CA
Phase Sensitive Innovations, Inc.	Newark	DE
PhasorLab, Inc.	Nashua	NH
Phelps2020, Inc.	Knoxville	TN
Phosphorus Cybersecurity, Inc.	Carlsbad	CA
Physical Optics Corporation	Torrance	CA
Physical Sciences, Inc.	Andover	MA
Piasecki Aircraft Corporation	Essington	PA
Pilot Al Labs, Inc.	Palo Alto	CA
Pison Technology, Inc.	Brookline	MA
Pixm, Inc.	Bedford	MA
Planck Aerosystems, Inc.	San Diego	CA
Plasma Processes, LLC	Huntsville	AL
PLEX Solutions	Bethesda	MD
Ploto, Inc.	Round Rock	TX
Polaris Sensor Technologies, Inc.	Huntsville	AL
Poplicus, Inc.	Arlington	VA
Possible Reality, Inc.	Los Angeles	СА
Powers Communications LLC	Bethesda	MI
Pramod	College Park	MD
Praxi Data, Inc.	Hillsborough	CA
Predictive Analytics, LLC	Sugar Land	TX
Prime 3 Software, Inc.	Chesapeake	VA

FIRM	CITY	ST
PrivOps	Alpharetta	GA
Prizm XR	Cold Spring	NY
Progressive Technology Federal Systems	Rockville	MD
Project Edge, LLC, The	Torrance	CA
Project OWL LLC	Brooklyn	NY
Protagonist Technology, LLC	San Francisco	CA
PsiKick, Inc.	Charlottesville	VA
PteroDynamics	Moorpark	CA
PURTEC, Inc.	Studio City	CA
Pvilion, Inc.	Brooklyn	NY
Pyrames, Inc.	Cupertino	CA
Q Networks	Menlo Park	CA
Q-Net Security	Saint Louis	МО
Qualtech Systems, Inc.	Rocky Hill	СТ
Quantum Insights, Inc.	Redwood City	CA
Qubitekk, Inc.	Bakersfield	CA
Quick Med Technologies, Inc.	Gainesville	FL
QuickCarl, Inc.	Oceanside	CA
QuinStar Technology, Inc.	Torrance	CA
QuSecure, Inc.	Belvedere Tiburon	CA
R-Stor, Inc.	Saratoga	CA
Ragnarok Industries, Inc.	West New York	NJ
Rainmaker Solutions, Inc.	El Segundo	CA
Raptor Engineering, LLC	Belvidere	IL
RDA Prep	Magnolia	TX
Real-Time Innovations	Sunnyvale	CA
Rebellion Defense, Inc.	Washington	DC
Redhawk Construction, Inc.	Oklahoma City	ОК
RedShred	Baltimore	MD
Reed and Associates LLC DBA Go-To-Market-Solutions	Huntsville	AL
Refactr IT, Inc.	Seattle	WA
Relativity Space, Inc.	Los Angeles	CA
REM Chemicals, Inc. dba REM Surface Engineering	Southington	СТ

FIRM	CITY	ST
Remediant, Inc.	San Francisco	CA
Research Associates of Syracuse	Rome	NY
Resolution Imagery, LLC dba Moth + Flame	Colorado Springs	СО
Resonado, Inc.	South Bend	IN
Reveal Technology, Inc.	Woodside	CA
Rhea Space Activity	Washington	DC
Rhumbix, Inc.	San Francisco	CA
Rincon Research Corporation	Tucson	AZ
RippleWorx	Huntsville	AL
RiskIQ, Inc.	San Francisco	CA
Roadbotics, Inc.	Pittsburgh	PA
Robotic Research LLC	Gaithersburg	MD
ROCCOR, LLC	Longmont	СО
Ross-Hime Designs, Inc.	Vancouver	WA
Rufus Labs, Inc.	West Hollywood	CA
RunSafe Security, Inc.	Mclean	VA
Rx Bandz LLC	Austin	TX
Sabrewing Aircraft Company, Inc.	Camarillo	CA
Sail Analytics, Inc.	Houston	TX
Sana Health, Inc.	Lafayette	СО
SangJen Al	Costa Mesa	CA
Sapient Industries, Inc.	Philapelphia	PA
Sarcos Group LC (dba Sarcos LC)	Salt Lake City	UT
Sc2 Corp.	Reston	FL
Scaled Power, Inc.	San Francisco	CA
Schoonmaker Construction, LLC	Hooper	UT
SciArt Software, Inc.	Madison	WI
Scientific Systems Company, Inc.	Woburn	MA
Securboration, Inc.	Melbourne	FL
Secure Enterprise Engineering	Rosedale	MD
Security First Corp.	Ladera Ranch	CA
Selection Pressure LLC (dba Ion Channel)	Alexandria	VA

FIRM	CITY	ST
Sellry, Inc.	Timnath	СО
Sema	Baltimore	MD
Semantic Al	San Diego	CA
Sensing Strategies, Inc.	Pennington	NJ
Sensor Creations, Inc.	Camarillo	CA
Sentenai, Inc.	Boston	MA
Sesame Solar, Inc.	Ypsilanti	MI
Shield Ai, Inc.	San Diego	CA
Shift5, Inc.	Arlington	VA
ShiftLeft, Inc.	Santa Clara	CA
Sierra Pacific Innovations Corp	Las Vegas	NV
SignalFrame	Washington	DC
Sigopt, Inc.	San Francisco	CA
Silverthread, Inc.	Boston	MA
SimVentions, Inc.	Fredericksburg	VA
SimX	Mountain View	CA
Sitch Ai	Costa Mesa	CA
SitScape, Inc.	Tysons	VA
Six Star Services, II, Inc. d/b/a Orchestra	Houston	TX
Sketchbox, Inc.	San Francisco	CA
Skillpower, Inc.	San Diego	CA
SkyRunner, LLC	Shreveport	LA
Skyward, Ltd.	Dayton	ОН
Slidesoft Technologies LLC	Pleasant Hill	МО
Slingshot Aerospace, Inc.	El Segundo	CA
Soar Technology, Inc.	Ann Arbor	MI
SocialTrendly, Inc.	Rochester	NY
SoftInWay, Inc.	Burlington	MA
Soliddd Corp	Brooklyn	NY
Soliyarn	Amherst	MA
Solute, Inc.	San Diego	CA
Somewear Labs, Inc.	San Francisco	CA
Southie Autonomy	Boston	MA
Space Exploration Engineering, LLC	Towson	MD

FIRM	CITY	ST
Space Information Laboratories, LLC	Santa Maria	CA
Space Micro, Inc.	San Diego	CA
Spark Thermionics, Inc.	San Francisco	CA
SparkCogntion, Inc.	Austin	TX
Special Operations Supply	Louisville	KY
Special Power Sources, LLC	Alliance	ОН
Spectrabotics, LLC	Colorado Springs	СО
Spectral Energies, LLC	Beavercreek	ОН
Spectral Labs, Inc.	San Diego	CA
Spectral Sciences, Inc.	Burlington	MA
Spectrum Photonics, Inc.	Honolulu	HI
Spell, Inc.	New York	NY
Speqtral Quantum Technologies, Inc.	Denver	СО
Splice Machine	San Francisco	CA
Spotlight Labs	Sterling Heights	MI
Sqwire, LLC	Norfolk	VA
StackRox, Inc.	Mountain View	СА
Starburst Accelerator, LLC	El Segundo	СА
Starfire Industries, LLC	Champaign	IL
Stash America LLC	Stamford	СТ
Steampunk, Inc.	Mclean	VA
Steel Horse Consulting Services, LLC	Lutz	FL
Strategi Consulting LLC	Chevy Chase	MD
Street Diligence, Inc.	New York	NY
Street Smarts VR	New York	NY
StreetCred Labs, Inc.	New York	NY
Summit Technology Laboratory	Irvine	CA
SunRay Scientific LLC	Long Branch	NJ
Sunshower.IO Corp.	Fort Collins	СО
Superior Float Tanks	Norfolk	VA
Surface Optics Corp	San Diego	СА
Swift Engineering, Inc.	San Clemente	СА
Sylabs, Inc.	Saratoga	СА

FIRM	CITY	ST
SynapseMX, Inc.	Atlanta	GA
Syndaver Labs	Tampa	FL
Systems Definition, Inc.	Alexandria	VA
Syzygy Integration LLC	Philadelphia	PA
T E D Text LLC	Virginia Beach	VA
Tackle Al	Bloomingdale	IL
Tangram Flex, Inc.	Dayton	ОН
Target Arm LLC	Ridgefield	СТ
Tarsier Systems LLC	San Francisco	CA
Tau Technologies LLC	Albuquerque	NM
TayCo Brace, LLC	South Bend	IN
TDA Research, Inc.	Wheat Ridge	СО
TEAM of Care Solutions, LLC	Fort Lee	NJ
TeamWorx Security, LLC	Columbia	MD
Technical Directions, Inc.	Ortonville	MI
Temper, Inc.	Cedar Springs	MI
Templarbit, Inc.	Irvine	CA
Temple Massager, Inc.	Cazadero	CA
TeraMetrix, LLC	Ann Arbor	MI
TERBINE	Las Vegas	NV
terrafuse, inc.	San Francisco	CA
Terves, Inc.	Euclid	ОН
TETAC	Monterey	CA
Tetrate.io, Inc.	San Francisco	CA
Texas Research Institute Austin, Inc.	Austin	TX
The Avascent Group, Ltd.	Washington	DC
The Dcode Group, Inc.	Washington D.c.	DC
The DVI Group	Atlanta	GA
The Informatics Applications Group	Reston	VA
ThermoAnalytics, Inc.	Calumet	MI
Thin Air Ventures	Camarillo	CA
ThorTactical LLC	San Diego	CA
Thought Stream LLC	San Carlos	СА
Tiptags, Inc.	North Hollywood	CA

FIRM	CITY	ST
TIS3, LLC	Haymarket	VA
Titan Robotics, Inc.	Pittsburgh	PA
Titus Human Performance Solutions	Tallahassee	FL
TonicAl, Inc.	San Francisco	CA
Torchlight Solutions	Arlington	MA
Toyon Research Corp	Goleta	CA
Traction Jedi Technologies, LLC	Bossier City	LA
Tradespace, Inc.	San Francisco	CA
TRAIN-WITH, Inc.	Half Moon Bay	CA
Transtecs Corporation	Wichita	KS
TRAXYL, Inc.	Warrenton	VA
Triagingx, Inc.	San Jose	CA
Trifacta, Inc.	San Francisco	CA
Triton Systems, Inc.	Chelmsford	MA
TUTORWORKS, Inc.	Burlingame	CA
UES, Inc.	Dayton	ОН
Uiba, Inc.	Brooklyn	NY
UmapAV Corp (dba PixElement)	Columbus	ОН
Umbra Lab, Inc.	Santa Barbara	СА
Unearth Technologies, Inc.	Seattle	WA
Union Global, Inc. PBC	Washington	DC
Unitary Labs, Inc.	Sunnyvale	CA
Ursa Major Technologies, Inc.	Berthoud	СО
V.S. Merlot, Inc.	Austin	TX
Vadum	Raleigh	NC
Van	Costa Mesa	CA
Vannevar Labs, Inc.	Palo Alto	CA
Veramine, Inc.	Bothell	WA
Veriphix, Inc.	Washington DC	DC
Verstaan Intelligence, Inc.	Somerville	MA
Via Science, Inc.	Somerville	MA
Vibrant Corporation	Albuquerque	NM
Victor Darolfi	Mountain View	CA
Vidrovr, Inc.	New York	NY

FIRM	CITY	ST
Vigilent, Inc. LLC	Washington	VA
Virtualitics	Pasadena	CA
Visual Awareness Technologies and Consulting, Inc. (VATC)	Tampa	FL
Vitro Technology Corporation	Austin	TX
VivSoft Technologies LLC	Ashburn	VA
Volare Systems	Highlands Ranch	СО
Volt Athletics	Fremont	WA
Vortex Control Technolgies	Kennesaw	GA
Voxel8, Inc.	Somerville	MA
VRC Metal Systems, LLC	Rapid City	SD
VRTUL, Inc.	Encinitas	CA
Wafer, LLC	Danvers	MA
Wallaroo Labs, Inc.	Brooklyn	NY
WANLYNX Cybersecurity	Hampton	VA
War on the Rocks Media LLC	Washington	DC
Warrior Centric Health LLC	Ellicott City	MD
Waterfull, Inc.	Whittier	CA
Wavecast Technologies, LLC	San Antonio	TX
Wavefront Research, Inc.	Northampton	PA
Webomates LLC	Stamford	СТ
WebSec Corporation	Murrieta	CA
Welkins, LLC	Downers Grove	IL
WholePoint Systems, LLC	Reston	VA

FIRM	CITY	ST
Wilder Systems, LLC	Austin	TX
WindBorne Systems, Inc.	Palo Alto	CA
WISER Systems, Inc.	Raleigh	NC
WorkMerk, LLC	Conshohocken	PA
World View Enterprises, Inc.	Tucson	AZ
www.criotsolutions.com	Coppell	TX
Wyoming Instrumentation Development	Laramie	WY
X994, LLC.	Austin	TX
Xage Security, Inc.	Palo Alto	CA
Xander LLC	San Diego	CA
Xemed LLC dba DPAL Technologies	Durham	NH
XL Scientific, LLC dba Verus Research	Albuquerque	NM
Xplore, Inc.	Mercer Island	WA
Yembo, Inc.	San Diego	CA
You Tune Hearing Protection, LLC	Oakwood	ОН
Zenith Aerospace	Palo Alto	CA
Zero Mass Water, Inc.	Tempe	AZ
Zios Corporation	Philadelphia	PA
Zone 5 Technologies, LLC	San Luis Obispo	CA

TOPIC AWARD SELECTEES STTR PHASE I

FIRM	CITY	ST
4D Forge LLC	Powell	ОН
A.W. Cain & Company	Pittsford	NY
Advent Innovations LTD.CO.	Columbia	SC
AdvR, Inc.	Bozeman	MT
Aging Aircraft Consulting, LLC dba Aging Aircraft Solutions	Warner Robins	GA

FIRM	CITY	ST
Alchemy Geopolymer Solutions, LLC	Ruston	LA
Aliro Technologies, Inc.	Boston	MA
Alphacore, Inc.	Tempe	AZ
AntennaSys, Inc.	Windham	NH
AOSense, Inc.	Sunnyvale	CA

FIRM	CITY	ST
APTIMA, Inc.	Woburn	MA
Arete Associates	Northridge	CA
ATRIUS Industries, Inc.	Austin	TX
Avkin, Inc.	New Castle	DE
Axon Connected, LLC.	Earlysville	VA
Azimuth Corporation	Beavercreek	ОН
Azimuth Corporation	Beavercreek	ОН
BCL Technologies	San Jose	CA
BDYWR, LLC	West Lafayette	IN
Blockchain Resources Group LLC	East Aurora	NY
Bloodstone Division, LLC	Tampa	FL
Blue Wave Semiconductors, Inc.	Columbia	MD
Business Expectations LLC	Painted Post	NY
Cerium Laboratories	Austin	TX
CFD Research Corporation	Huntsville	AL
Clarity Innovations LLC	Columbia	MD
CompuTherm LLC	Middleton	WI
Corvid Technologies, LLC	Mooresville	NC
Cyber 20/20, Inc.	Newark	DE
Digital Optics Technologies, Inc.	Rolling Meadows	IL
Digitas LLC	Fremont	CA
Distat Co	Kennett Square	PA
ERG Aerospace Corporation	Oakland	CA
Experimental Design and Analysis Solutions	Spring Hill	TN
Fearless Solutions, LLC	Baltimore	MD
FIRST RF CORPORATION	Boulder	СО
Freedom Photonics LLC	Goleta	CA
Great Lakes Crystal Technologies	East Lansing	MI
Guided Particle Systems, Inc.	Pensacola	FL
H. F. Webster Engineering Services, Inc.	Box Elder	SD
HodlPal, Inc.	Melrose	MA
Iconic Air	Wheeling	WV

FIRM	CITY	ST
InferLink Corporation	El Segundo	CA
Information Systems Laboratories, Inc.	Poway	VA
IntelliGenesis LLC	Columbia	MD
Intelligent Automation, Inc.	Rockville	MD
Intelligent Fiber Optic Systems Corporation	San Jose	CA
Intelligent Fusion Technology, Inc.	Germantown	MD
Intuidex, Inc.	Hellertown	PA
Iris Light Technologies, Inc.	Chicago	IL
KalScott Engineering, Inc.	Lawrence	KS
LIFT Aircraft, Inc.	Austin	TX
Long Wave, Inc.	Oklahoma City	ОК
LongShortWay	Boston	MA
Lynntech, Inc.	College Station	TX
Mainstream Engineering Corporation	Rockledge	FL
Masten Space Systems, Inc.	Mojave	СА
MaXentric Technologies LLC	Fort Lee	NJ
Mesodyne	Somerville	MA
Metallurgical Acoustic Research Solutions, LLC	Murray	KY
Metron, Inc.	Reston	VA
MicroSol Technologies, Inc.	Dallas	TX
MRL Materials Resources LLC	Beavercreek	ОН
Nahsai LLC	Houston	TX
Nano Medicine Research & Development LLC	Monroe	LA
Nanomatronix	Fayetteville	AR
NanoSonic, Inc.	Pembroke	VA
Nautilus Defense LLC	Pawtucket	RI
necoTech LLC	Delaware	ОН
NextGen Imaging Technologies, Inc.	Windham	NH
Nexus Photonics	Santa Barbara	СА
Non-Contact Technologies, LLC	Tullahoma	TN
Notch, Inc.	Cambridge	MA

FIRM	CITY	ST
Nu-Trek	San Diego	CA
O Analytics, Inc.	Fairmont	WV
Oceanit Laboratories, Inc.	Honolulu	HI
Oddball, Inc.	WASHINGTON	DC
OLGS, Inc.	West Falmouth	MA
Ombra LLC	Tampa	FL
OptiCOMP Networks	Attleboro	MA
OrganicNANO, Inc.	Monroe	LA
Passenger, Inc.	Austin	TX
Physical Sciences, Inc.	Andover	MA
Pointwise, Inc.	Fort Worth	TX
PrediCOR LLC	Bratenahl	ОН
Project OWL LLC	Brooklyn	NY
Qardian Labs	Knoxville	TN
QC Ware	Palo Alto	CA
Qubitekk, Inc.	Bakersfield	CA
QuEra Computing, Inc.	Boston	MA
Qunnect LLC	Stony Brook	NY
Resono Pressure Systems	Laramie	WY
Rhea Space Activity	Washington	DC
Riclab, LLC	Pasadena	CA
Rigetti & Co, Inc.	Berkeley	CA
Rogue Approach	Bend	OR
Sage Smart Garden, LLC	Philadelphia	PA
SciFi Innovations LLC	Chicago	IL
SeeQC, Inc.	Elmsford	NY
Sensatek Propulsion Technology, Inc.	Tallahassee	FL
SHIO LLC	Newark	DE

FIRM	CITY	ST
Sivananthan Laboratories, Inc.	Bolingbrook	IL
SK Infrared LLC	Hilliard	ОН
Skylight Digital LLC	Chapel Hill	NC
Space Initiatives, Inc.	Palm Bay	FL
Special Power Sources, LLC	Alliance	ОН
Spectral Energies, LLC	Beavercreek	ОН
Speqtral Quantum Technologies, Inc.	Denver	СО
Stable Laser Systems	Boulder	СО
Streamline Automation, LLC	Huntsville	AL
Structured Materials Industries	Piscataway	NJ
Sync Computing	Cambridge	MA
TIPD, LLC	Tucson	AZ
Toyon Research Corp.	Goleta	CA
Trek10	South Bend	IN
Twinleaf	Plainsboro	NJ
Ubihere, Inc.	Columbus	ОН
UHV Technologies, Inc.	Lexington	TX
Ultool LLC	Duluth	GA
UtopiaCompression, Corporation	Los Angeles	CA
Vescent Photonics LLC	Golden	СО
Viaforensics, LLC	Chicago	IL
Voxel Innovations	Raleigh	NC
VRC Metal Systems, LLC	Box Elder	SD
X-wave Innovations, Inc.	Gaithersburg	MD
Yanhai Power Technology	Hudson	ОН
York Space Systems, LLC	Denver	СО
Zenith Aerospace	Palo Alto	CA



TOPIC AWARD SELECTEES SBIR PHASE II

FIRM	CITY	ST
(ES3) Engineering & Software System Solution, Inc.	San Diego	СА
202 Group LLC	Washington	DC
214 Technologies, Inc.	Venice	CA
3D Cloud LLC	Fort Walton Beach	FL
a.i. solutions, Inc.	Lanham	MD
ABL Space Systems	El Segundo	CA
AC Global Risk	Napa	CA
Accion Systems	Boston	MA
ACE Running LLC	Wilmington	DE
Aceso Plasma, LLC	Virginia Beach	VA
ACTA SBIR Holdings LLC	Torrance	CA
Active Signal Technologies, Inc.	Linthicum Heights	MD
Actovos LLC	Oklahoma City	ОК
ADA Technologies, Inc.	Littleton	СО
Adaptive Surface Technologies, Inc.	Cambridge	MA
Adelos, Inc.	Polson	MT
Adlumin, Inc.	Washington Dc	DC
Adranos, Inc.	West Lafayette	IN
Advanced Global Services	Orchard Park	NY
Advanced Photon Sciences, LLC	Essex Junction	VT
Advanced Processing Technology, Inc.	Norman	ОК
Advanced Silicon Group	Lincoln	MA
Adyptation LLC	Springboro	ОН
Aerocine Ventures, Inc.	Brooklyn	NY
Aerocore Technologies LLC	Zionsville	IN
AeroDefense	Holmdel	NJ
Aevum, Inc.	Huntsville	AL
Agolo	New York	NY
Al.Reverie, Inc.	New York	NY
Air Logistics and Engineering Solutions	Warner Robins	GA
Airborne Outfitters, LLC	Dayton	ОН

FIRM	CITY	ST
AirMap, Inc.	Santa Monica	CA
All Vision Intelligence	Arlington	VA
ALPHA STAR	Long Beach	CA
AlphaBravo	Gaithersburg	MD
ALQIMI NATIONAL SECURITY, Inc.	Rockville	MD
alYnmnt Dev I, Inc.	Irvine	CA
AmpHP, Inc.	Park City	UT
Amsel Medical Corporation	Cambridge	MA
Analatom, Inc.	Santa Clara	CA
Analytical Space, Inc.	Cambridge	MA
Anautics, Inc.	Oklahoma City	ОК
Anchore, Inc.	Santa Barbara	CA
Anduril Industries, Inc.	Irvine	CA
Anno.Al, Inc.	Reston	VA
Apogee Worx, LLC	Ogden	UT
Applied Optimization, Inc.	Fairborn	ОН
Aptima, Inc.	Woburn	MA
Architecture Technology Corporation	Eden Prairie	MN
Arete Associates	Northridge	CA
Arganteal, Corp.	Austin	TX
Armaments Research Company, Inc.	Bethesda	MD
Artium Technologies, Inc.	Sunnyvale	CA
Ascendant Engineering Solutions LLC	Austin	TX
Ascentia Imaging, Inc.	Boulder	СО
Astranis Space Technologies Corp.	San Francisco	CA
Astranis Space Technologies Corp.	San Francisco	CA
Asylon, Inc.	Philadelphia	PA
Asymmetric Technologies LLC	Columbus	ОН
Athenium LLC	Dover	NH
ATLAS Space Operations, Inc.	Traverse City	MI
Atmospheric & Space Technology Research Associates	Louisville	СО

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FIRM	CITY	ST
Atomos Nuclear and Space Corporation	Denver	СО
Autonodyne LLC	Boston	MA
AvaWatz Company	Addison	TX
Averatek Corp	Santa Clara	CA
Aviana Molecular Technologies, LLC	Orlando	FL
Aviation Resources and Consulting Service	Cookeville	TN
Aviation Resources and Consulting Services, LLC (ARCS)	Cookeville	TN
Avilution, LLC	Madison	AL
Axellio, Inc.	Colorado Springs	СО
BadVR, Inc.	Marina Del Rey	CA
Baker Engineering LLC	Nunica	MI
Bascom Hunter Technologies	Baton Rouge	LA
Basic Commerce and Industries, Inc.	Moorestown	NJ
Bastille Networks, Inc.	Santa Cruz	CA
Bastille Networks, Inc.	Santa Cruz	CA
Battle Sight Technologies	Dayton	ОН
Bazze & Company, LLC	Arlington	VA
Bear Systems	Boulder	СО
Beta Technologies, LLC	South Burlington	VT
BILT, Inc.	Grapevine	TX
Bionic Lift	Moseley	VA
Black Swift Technologies LLC	Boulder	СО
BlackSky Geospatial Solutions, Inc.	Herndon	VA
Blade Diagnostics Corporation	Pittsburgh	PA
Blingby LLC	New York	NY
Blue Cedar, Inc.	San Francisco	CA
Blue Force Technologies, Inc.	Morrisville	NC
Blue Wave Semiconductors, Inc.	Columbia	MD
Blueforce Development Corporation	Newburyport	MA
Boom Technology, Inc.	Englewood	СО

FIRM	CITY	ST
BOTANISOL ANALYTICS INC	Phoenix	AZ
Bowerbags LLC	Arlington	VA
Bra-Ket Science	Austin	TX
BrainGu, LLC	Grand Rapids	MI
Branch Technology	Chattanooga	TN
Braxton Technologies, LLC	Colorado Springs	СО
Bulzi Media, Inc.	Newport Beach	CA
C3 IoT, Inc.	Redwood	CA
C360 Technologies	Wexford	PA
Calypso Al	San Mateo	СА
Capella Space Corp.	San Francisco	СА
CarbonCycle, LLC	Mansfield	МО
Carestarter Technologies, Inc.	Cedar Creek	TX
CFD Research Corp.	Huntsville	AL
Chandah Space Technologies	Sugar Land	TX
Chandler Automated Systems LLC DBA Vigilant Technologies	Tempe	AZ
Channel Logistics LLC	Camden	NJ
Charles River Analytics, Inc.	Cambridge	MA
Cigent Technology	Ft Myers	FL
Cipher Skin, Inc.	Wheat Ridge	СО
Cityflag, Inc.	San Antonio	TX
Clarity Innovations	Columbia	MD
Clear Aspect Solutions, LLC	Hampton	VA
CloudJuncxion, Inc.	Bridgewater	NJ
Cognitive Space, Inc.	Manvel	TX
Cognovi Labs, Inc.	Columbus	ОН
Colvin Run Networks, Inc.	Leesburg	VA
Combat Power Solutions	Apex	NC
Compass Technology Group LLC	Alpharetta	GA
Computer Measurement Laboratory, Inc.	Meridian	ID
Computer Technology Associates, Inc.	Ridgecrest	CA
Conceptual Research Corporation	Playa Del Rey	СА

FIRM	CITY	ST
		CA
Continental Controls and Design, Inc.	Huntington Beach	CA
Copious Imaging LLC	Lexington	MA
Core Parts LLC	Mesa	AZ
Cornerstone Research Group, Inc.	Miamisburg	ОН
Corvid Technologies, LLC	Mooresville	NC
Cougaar Software, Inc.	Vienna	VA
Creare LLC	Hanover	NH
Crow King Studios LLC	Baton Rouge	LA
CrowdAl	Mountain View	CA
Cuberg, Inc.	Emeryville	CA
CVD MesoScribe Technologies Corporation	Central Islip	NY
Cyan Systems	Goleta	CA
Cyber COAST LLC	Arlington	VA
DAngelo Technologies, LLC	Beavercreek	ОН
Dark Wolf Solutions, LLC	Chantilly	VA
Decision Lens, Inc.	Arlington	VA
DeepSig, Inc.	Arlington	VA
Delta Development Team LLC	Tucson	AZ
Delta Sigma Company	Kennesaw	GA
Denim Group, LTD	San Antonio	TX
Dephy, Inc.	Maynard	MA
Descartes Labs, Inc.	Santa Fe	NM
Dimension Technologies, Inc.	Rochester	NY
DittoLive, Inc.	San Francisco	CA
Diversified Technologies, Inc.	Bedford	MA
Dogwood Logic, LLC	Blacksburg	VA
Dream Systems, LLC	Roseville,	CA
DSQUORUM, LLC (dba Data Society)	Washington	DC
DUJUD LLC	Atlanta	GA
Dynamic Ideas	Belmont	MA
DZYNE Technologies, Inc.	Fairfax	VA
Earth Observant, Inc.	El Granada	CA
EarthCast Technologies, LP	Marshall	NC

FIRM	CITY	ST
Ebert Composites Corporation	Chula Vista	СА
Eclipse Energy Systems, Inc.	St. Petersburg	FL
Ecliptic Enterprices Corporatin	Pasadena	CA
Edaptive Computing, Inc.	Dayton	ОН
Eiden Systems Corporation	Charlottesville	VA
Element 119 LLC	Thomaston	СТ
EM Photonics, Inc.	Newark	DE
Embody, Inc.	Norfolk	VA
Emergent Space Technologies, Inc.	Laurel	MD
Empirical Systems Aerospace	San Luis Obispo	CA
Engine Research Associates, Inc.	Fort Wayne	IN
Engineering And Software System Solutions, Inc.	San Diego	CA
Enveil	Fulton	MD
Enview	San Francisco	CA
esc Aerospace US, Inc.	Orlando	FL
Even Health	Annapolis	MD
Event 38 Unmanned Systems, Inc.	Akron	ОН
Exabyte, Inc.	San Francisco	CA
ExoAnalytic Solutions, Inc.	Foothill Ranch	CA
Experimental Design & Analysis Solutions, Inc.	Spring Hill	TN
F3 Solutions	Warner Robins	GA
Fabric8Labs, Inc.	Berkeley	СА
Far UV Technologies, Inc.	Kansas City	МО
FASTPORT, Inc.	Lowell	MA
Fifth Gait Technologies	Santa Barbara	CA
Figure, Inc. d/b/a Figure Engineering	Lorton	VA
FishEye Software, Inc.	Maynard	MA
Flawless Photonics	Mountain View	CA
Flightwave Aerospace Systems Corporation	Santa Monica	CA
Fluree PBC	Winston Salem	NC
Formalloy Technologies, Inc.	Spring Valley	CA

FIRM	CITY	ST
Fourth State Communications, LLCve Defense-Related Dual-Purpose Technologies/ Solutions with a Clear Air Force Stakeholder Need	Cheyenne	WY
FoVI 3D	Austin	TX
Fraym, Inc.	Mclean	VA
Frontier Technology, Inc.	Beavercreek	ОН
FTL Labs	Amherst	MA
FTL Labs Corporation	Amherst	MA
G2 Ops, Inc.	Virginia Beach	VA
Gecko Robotics, Inc.	Pittsburgh	PA
GeneCapture, Inc.	Huntsville	AL
General Radar Corp	Menlo Park	CA
Geneva Technologies, Inc.	Monument	СО
GenXComm, Inc.	Austin	TX
GeoOptics, Inc.	Pasadena	CA
Geosite, Inc.	Stanford	CA
Geospark Analytics	Herndon	VA
GIGSKY, Inc.	Palo Alto	CA
Global Circuit Innovations, Inc.	Colorado Springs	СО
Global Science & Technology, Inc WV Division	Greenbelt	MD
GLOTECH, Inc.	Rockville	MD
GoHypersonic, Inc.	Dayton	ОН
Golden Recursion, Inc.	San Francisco	CA
GoPlug Bags, Inc.	Provo	UT
Graf Research Corporation	Blacksburg	VA
Graffiti Enterprises LLC	Somerset	NJ
Graftworx	South San Francisco	CA
GRAMMATECH, Inc.	Ithaca	NY
Granite Mountain Industries LLC	South Portland	ME
Graphika, Inc.	New York	NY
Green Magic Homes	Aventura	FL
Greetly, Inc.	Denver	СО
GreyCliff Industries, Inc.	Kettering	ОН

FIRM	CITY	ST
Greystones Consulting Group, LLC	Washington	DC
Guidestar Optical Systems, Inc.	Longmont	СО
Guidewaves	Bellefonte	PA
Gyro-Stabilized Systems, LLC.	Nevada City	СА
Hashlit, Inc. d/b/a Corsha	Vienna	VA
Havik Solutions LLC	San Diego	СА
Hermeus Corporation	Atlanta	GA
Higher Ground	Palo Alto	СА
HJ Science & Technology, Inc.	San Leandro	СА
HTX Labs, LLC	Houston	TX
Huckworthy	Washington	DC
Human systems Integration, Inc.	Walpole	MA
Hybrid Communications, Inc.	Lenexa	KS
IBC Materials & Technologies	Lebanon	IN
ICR, Inc.	Aurora	СО
IERUS Technologies, Inc.	Huntsville	AL
Illumination Works, LLC	Beavercreek	ОН
Imaginestics, LLC	West Lafayette	IN
Impossible Aerospace Corporation	Santa Clara	СА
Improve Group	Albuquerque	NM
IMSAR LLC	Springville	Ut
IN SPACE, LLC	West Lafayette	IN
InfiniteTactics, LLC	Beavercreek	ОН
Information Systems Laboratories, Inc.	Poway	СА
Innoflight, Inc.	San Diego	СА
InnoSys	Salt Lake City	UT
Innovative Rocket Technologies, Inc.	New Hyde Park	NY
Innovator Health, LLC	Englewood	ОН
Inovati	Santa Barbara	СА
InspiRD, Inc.	Mission Viejo	СА
Intelesense Technologies	Fremont	СА
IntelliEPI IR, Inc.	Richardson	TX

FIRM	CITY	ST
Intelligent Automation, Inc.	Rockville	MD
Intellisense Systems, Inc.	Torrance	CA
International Electronic Machines	Troy	NY
Intrinsic Enterprises, Inc.	Newcastle	WA
Ionic Security, Inc.	Atlanta	GA
ITAMCO 350987380	Plymouth	IN
JETCOOL Technologies, Inc.	Littleton	MA
Karagozian and Case, Inc.	Glendale	CA
KEF Robotics, Inc.	Pittsburgh	PA
Kennon Products, Inc.	Sheridan	WY
Keystone Synergistic Enterprises, LLC	Port Saint Lucie	FL
Knowledge Based Systems, Inc.	College Station	TX
Launcher, Inc.	Brooklyn	NY
LaunchPath Innovation, LLC	North Charleston	SC
Liberty Dynamic	Colorado Springs	СО
LIFT Aircraft, Inc.	Austin	TX
Liftwave, Inc.	Somerville	MA
Lilt, Inc.	San Francisco	CA
Link to Learn LLC	Denver	СО
Locoal Charcoal Company LLC	Del Valle	TX
Louthan Engineering	Baltimore	MD
Lucid Circuit, Inc.	Santa Monica	CA
Lumena, Inc.	Denver	СО
Luna Innovations, Inc.	Roanoke	VA
Lunar Resources, Inc.	Houston	TX
Lynntech, Inc.	College Station	TX
Macro-Eyes, Inc.	Fall City	WA
Mad Apparel, Inc.	Redwood City	CA
Magnum Opus, LLC	Los Angeles	CA
MainStem dba BlackLynx Services	Fulton	MD
Management Sciences, Inc.	Albuquerque	NM
MARK Resources, Inc.	Torrance	CA
MATBOCK, LLC	Virginia Beach	VA

FIRM	CITY	ST
Materials Sciences LLC	Horsham	PA
Matrix Games LLC	Bellvue	WA
MATSYS, Inc.	Sterling	VA
MaXentric Technologies LLC	Fort Lee	NJ
MaXentric Technologies LLC	Fort Lee	NJ
Mayflower Communications Company, Inc.	Bedford	MA
Mechanical Solutions, Inc.	Whippany	NJ
Metacomp Technologies, Inc.	Agoura Hills	CA
Metis Design Corporation	Boston	MA
Metna Co.	Lansing	MI
MetroLaser, Inc.	Laguna Hills	СА
METSS Corporation	Westerville	ОН
MFB Fertility	Erie	СО
MicroLink Devices	Niles	IL
MITEK ANALYTICS LLC	Palo Alto	CA
Mobius Logic, Inc.	Falls Church	VA
Mocana Corporation	Sunnyvale	CA
Modula S, Inc.	Sun Valley	ID
Modus Operandi, Inc.	Melbourne	FL
Mohawk Innovative Technology, Inc.	Albany	NY
Monkton, Inc.	Vienna	VA
Montuno Software, LLC	Brambleton	VA
MZA Associates Corporation	Albuquerque	NM
Nanodropper, Inc.	Seattle	WA
NanoSonic, Inc.	Pembroke	VA
NAVSYS Corporation	Colorado Springs	СО
NeuroFlow, Inc.	Philadelphia	PA
Neurovation Labs, Inc.	New York	NY
New Eagle Consulting LLC	Ann Arbor	MI
NextGen Balancing Technologies, LLC	Morrisville	VT
nFlux, Inc.	Los Angeles	СА
NGD Systems, Inc.	Irvine	CA
NNData Corporation	Alexandria	VA
Node Centric Solutions LLC	Monument	СО

FIRM	CITY	ST
Nokomis, Inc.	Charleroi	PA
North American Wave Engine Corporation	College Park	MD
Northstrat, Inc.	Sterling	VA
nou Systems, Inc.	Huntsville	AL
NOVI LLC	Arlington	VA
NPS Radar LLC	San Ramon	CA
NuCrypt LLC	Evanston	IL
Numerica Corporation	Fort Collins	СО
nVision Technology, Inc.	Norton	ОН
Occupath, LLC	Oklahoma City	ОК
Oceanit Laboratories, Inc.	Honolulu	НІ
Oddball, Inc.	Washington	DC
Oleolive LLC	Shreveport	LA
Olifant Medical	San Antonio	TX
Omitron, Inc.	Beltsville	MD
Omni Fed LLC	Gainesville	VA
Omnispace	Tysons	VA
ONVECTOR LLC	King Of Prussia	PA
Open Additive, LLC	Beavercreek	ОН
Open X Education, Inc.	Signal Hill	CA
Optimal Synthesis, Inc.	Los Altos	CA
Optivolt Labs, Inc.	Burlingame	CA
Optomec, Inc.	Albuquerque	NM
optoXense, Inc.	San Ramon	CA
Orbit Fab	Santa Clara	CA
Orbit Logic, Inc.	Greenbelt	MD
Orbital Micro Systems, Inc.	Boulder	СО
Orbital Research, Inc.	Cleveland	ОН
Oteemo, Inc.	Reston	VA
ouraring, Inc.	San Francisco	CA
Outdoor Survival LLC	Babylon	NY
Outpatient, Inc.	Danville	CA
Ozark Integrated Circuits, Inc.	Fayetteville	AR
Pandata Tech, Inc.	Houston	TX

FIRM	CITY	ST
Parabilis Space Technologies, Inc.	San Marcos	СА
Parabilis Space Technologies, Inc.	San Marcos	CA
Parabol, Inc.	Alhambra	CA
Paragon Robotics	Bedford Heights	ОН
Paragrine Systems, LLC	San Diego	CA
Paravision, Inc.	San Francisco	CA
Patrocinium Systems, Inc.	Reston	VA
PCMG	N/A	N/A
Peak Performance Leadership, LLC	Killingworth	СТ
Perceptronics Solutions, Inc.	Sherman Oaks	CA
Perfect Point EDM Corporation	Huntington Beach	СА
Permuta Technologies	Springfield	VA
Photon-X, Inc.	Kissimmee	FL
Physical Optics Corp.	Torrance	CA
Physical Sciences, Inc.	Andover	MA
Piasecki Aircraft Corporation	Essington	PA
PIQNIQ, Inc.	Redwood City	CA
PlaneEnglish LLC	Pittsburgh	PA
PlateJoy	San Francisco	CA
Polaris Sensor Technologies, Inc.	Huntsville	AL
Powdermet, Inc.	Euclid	ОН
Power Fingerprinting, Inc.	Vienna	VA
Powers Communications LLC	Bethesda	MD
Praeses, LLC	Shreveport	LA
Praxi Data, Inc.	Hillsborough	CA
Primer Technologies, Inc.	San Francisco	CA
Printed Circuits Corp	Lilburn	GA
Priomatics, Inc.	Covington	ОН
PROMET International, Inc. (dba Promet Optics)	Shoreview	MN
Propulsion Science and Technology, Inc.	Langhorne	PA
Protagonist Technology, LLC	San Francisco	СА
PsiKick, Inc.	Santa Clara	CA

FIRM	CITY	ST
Public Spend Forum, LLC	Washington	DC
Pvilion, Inc.	Brooklyn	NY
Q Networks	Menlo Park	CA
Q-Net Security	Saint Louis	МО
QED Secure Solutions	Coppell	TX
Qubitekk, Inc.	Bakersfield	CA
R-DEX Systems, Inc.	Marietta	GA
RadiaBeam Technologies, LLC	Santa Monica	CA
Ragnarok Industries, Inc.	West New York	NJ
RallyPoint Networks, Inc.	Waltham	MA
Rapid Imaging Technologies LLC	Middleton	WI
Real-Time Innovations	Sunnyvale	CA
RealNetworks, Inc.	Seattle	WA
Rebellion Defense, Inc.	Washington	DC
RED SIX AEROSPACE INC	Venice	CA
ReFirm Labs, Inc.	Fulton	MD
ReliaCoat Technologies, LLC	East Setauket	NY
Remote Health Solutions, LLC	Midlothian	VA
Resodyn Corporation	Butte	MT
Resolution Imagery, LLC dba Moth + Flame	Colorado Springs	СО
RevaComm.Inc	Honolulu	НІ
Reveal Technology, Inc.	Woodside	CA
Rheaply, Inc.	Chicago	IL
Rhumbix, Inc.	San Francisco	CA
Rini Technologies, Inc.	Oviedo	FL
ROCCOR, LLC	Longmont	СО
Roy Operating Company LLC	Thibodaux	LA
RunSafe Security, Inc.	Mclean	VA
SA Photonics, Inc.	Los Gatos	CA
Sabrewing Aircraft Company, Inc.	Camarillo	CA
SameGrain, Inc.	Ellicott City	MD
SaraniaSat, Inc.	Tujunga	CA
Sarcos Group LC (dba Sarcos LC)	Salt Lake City	UT

FIRM	CITY	ST
Scaled Power, Inc.	San Francisco	CA
Scientific Systems Company, Inc.	Woburn	MA
SciTec, Inc.	Princeton	NJ
Securboration, Inc.	Melbourne	FL
Secure Enterprise Engineering	Rosedale	MD
Securisyn Medical, LLC	Highlands Ranch	СО
Segue Technologies, Inc.	Arlington	VA
Selection Pressure LLC (dba Ion Channel)	Alexandria	VA
Sellry, Inc.	Timnath	СО
Sempulse	San Marcos	TX
Sentecor	Tremonton	UT
Servenity LLC	Dunwoody	GA
Shield AI, Inc.	San Diego	СА
Shift5, Inc.	Arlington	VA
Shocktech, Inc.	Mahwah	NJ
SIMBA Chain, Inc.	Plymouth	IN
SIMETRI	Winter Park	FL
SimpleSense, Inc.	Erie	PA
SimX	Mountain View	CA
Sketchbox, Inc.	San Francisco	СА
Slingshot Aerospace, Inc.	El Segundo	CA
Smart Information Flow Technologies, d/b/a SIFT	Minneapolis	MN
Smarter Reality, LLC	Round Rock	TX
SmileML, Inc.	Indianapolis	IN
Soar Technology, Inc.	Ann Arbor	MI
Solute, Inc.	San Diego	CA
Sonalysts, Inc.	Waterford	СТ
Sonitus Technologies, Inc.	San Mateo	CA
Space Exploration Engineering, LLC	Towson	MD
Space Micro, Inc.	San Diego	CA
SpaceWorks Enterprises, Inc. (SEI)	Atlanta	GA
SPARK Neuro, Inc.	New York	NY
SparkCogntion, Inc.	Austin	TX

FIRM	CITY	ST
Spectral Energies, LLC	Beavercreek	ОН
Spectral Sciences, Inc.	Burlington	MA
Speqtral Quantum Technologies, Inc.	Denver	СО
Spire Global, Inc.	San Francisco	CA
Splice Machine	San Francisco	CA
Squire Solutions, Inc.	New York	NY
StackRox, Inc.	Mountain View	CA
Steel Modular, Inc.	Beverly Hills	CA
Stellar Science Ltd Co	Albuquerque	NM
Stottler Henke Associates, Inc.	San Mateo	CA
Street Smarts VR	New York	NY
Strive Tech, Inc.	Bothell	WA
Summit Technology Laboratory	Irvine	CA
SunRay Scientific LLC	Long Branch	NJ
SURGIBOX INC.	Brookline	MA
Synaptech LLC	Colorado Springs	СО
Syndaver Labs	Tampa	FL
Systems Definition, Inc.	Alexandria	VA
Syzygy Integration LLC	Philadelphia	PA
Tackle AI	Bloomingdale	IL
TakeFlight Interactive	Redmond	WA
Talyn Air, Inc.	Los Angeles	CA
Tangram Flex, Inc.	Dayton	ОН
TANIST Technologies LLC	Falcon	СО
Tarsier Systems LLC	San Francisco	CA
TDA Research, Inc.	Wheat Ridge	СО
TeamWorx Security, LLC	Columbia	MD
Technergetics, LLC	Utica	NY
Technology Service Corporation	Arlington	VA
Tectus Corporation	Saratoga	CA
Terametrix, LLC	Ann Arbor	MI
terrafuse, inc.	San Francisco	CA
Tetrahive Technologies	Brentwood	TN
The Avascent Group, Ltd.	Washington	DC

FIRM	CITY	ST
The Dcode Group, Inc.	Washington D.c.	DC
The DVI Group	Atlanta	GA
The Stratagem Group, Inc.	Aurora	СО
Thermal Wave Imaging, Inc.	Ferndale	MI
ThermoAnalytics, Inc.	Calumet	MI
Thought Stream LLC	San Carlos	CA
Tier 1 Performance Solutions, LLC	Kentucky	KY
TIS3, LLC	Haymarket	VA
Titus Human Performance Solutions	Tallahassee	FL
Toyon Research Corp.	Goleta	CA
Traction Jedi Technologies, LLC	Bossier City	LA
Tradespace, Inc.	San Francisco	CA
Transparent Sky	Edgewood	NM
Traxyl, Inc.	Warrenton	VA
Trek10	South Bend	IN
TriboTEX LLC	Colfax	WA
Trike Industries LLC	Draper	UT
TRITON SYSTEMS, Inc.	Chelmsford	MA
TrueNano, Inc.	Boulder	СО
Trumbull Unmanned, LLC	Houston	TX
TRX Systems, Inc.	Greenbelt	MD
Tyvak Nano Satellite Systems, Inc.	Irvine	CA
TYVAK-NON SATTELITE SYSTEMS	Irvine	CA
UBIHERE, Inc.	Columbus	ОН
UbiquitiLink, Inc. (transitioning to Lynk Global, Inc.)	Falls Church	VA
UES, Inc.	Dayton	ОН
Unearth Technologies, Inc.	Seattle	WA
Union Global, Inc. PBC	Washington	DC
United Protective Technologies, LLC	Locust	NC
Universal Synaptics	Roy	UT
Urbineer, Inc.	Los Angeles	CA

FIRM	СІТҮ	ST
Ursa Major Technologies, Inc.	Berthoud	СО
Vantage Robotics	San Leandro	CA
Vennli, Inc.	South Bend	IN
Veramine, Inc.	Bothell	WA
VertiPrime Government Services	Frisco	TX
VEXTEC Corporation	Brentwood	TN
Via Science, Inc.	Somerville	MA
viaForensics, LLC	Chicago	IL
Vidrovr, Inc.	New York	NY
Vigilant Cyber Systems, Inc.	Mount Airy	NC
Virtualitics	Pasadena	CA
VirtualPaint Products	Cedar Falls	IA
Vision Systems, Inc.	Riverside	RI
Visionary Products, Inc.	Draper	UT
Vita Inclinata Technologies	Broomfield	СО
VivSoft Technologies LLC	Brambleton	VA
Voi, Inc.	Hanover	NH

FIRM	CITY	ST
Volans-I, INC	Concord	CA
VRgluv, LLC	Atlanta	GA
Wafer, LLC	Danvers	MA
Wallaroo Labs, Inc.	Brooklyn	NY
WANDR STUDIO LLC	Los Angeles	CA
War on the Rocks Media LLC	Washington	DC
Wasatch Molecular, Inc.	Salt Lake City	UT
Westlight Networks, Inc.	Palo Alto	CA
Wilder Systems, LLC	Austin	TX
WindBorne Systems, Inc.	Palo Alto	CA
World View Enterprises, Inc.	Tucson	AZ
WPL, Inc.	Manhattan Beach	CA
Xage Security, Inc.	Palo Alto	CA
Xemed LLC dba DPAL Technologies	Durham	NH
Yet Analytics, Inc.	Baltimore	MD
Z Advanced Computing, Inc.	Potomac	MD

TOPIC AWARD SELECTEES STTR PHASE II

FIRM	CITY	ST
0 Base Design, LLC	Wake Forest	NC
A.W. Cain & Company	Pittsford	NY
Alphacore, Inc.	Tempe	AZ
AlphaMicron, Inc.	Kent	ОН
Applied Optimization, Inc.	Fairborn	ОН
Arrow Tech Associates	South Burlington	VT
ATA Engineering, Inc.	San Diego	CA
Atmospheric & Space Technology Research Associates	Louisville	СО
Atrevida Science (Modern Energy) dba Hall, Claudia Maldonado	Clarence Center	NY

FIRM	CITY	ST
Augmented Reality (AR) Software for Training Applications in F-16 Safety Checklist, AGE Hydraulic Test, and F119 Engine Fuel System	Kennett Square	PA
BDYWR, LLC	West Lafayette	IN
Bloodstone Division, LLC	Tampa	FL
Casey Corp Defense	Stillwater	ОК
Celadyne Technologies, Inc.	San Jose	CA
Cellec Technologies, Inc.	Rochester	NY
Centeye, Inc.	Washington	DC
Cerium Laboratories	Austin	TX

FIRM	CITY	ST
Combustion Research and Flow Technology, Inc.	Pipersville	PA
Corvid Technologies, LLC	Mooresville	NC
Digitas LLC	Fremont	CA
Distat Co	Kennett Square	PA
Diversified Technologies, Inc.	Bedford	MA
Electro Magnetic Applications, Inc.	Lakewood	СО
Electronics of The Future, Inc.	Vienna	VA
Endectra, LLC	Ann Arbor	MI
ESTAT Actuation	Pittsburgh	PA
Exciting Technology LLC	Dayton	ОН
Exosonic, Inc.	San Jose	CA
Experimental Design & Analysis Solutions, Inc.	Spring Hill	TN
Global Circuit Innovations, Inc.	Colorado Springs	СО
Global Technology Connection, Inc.	Atlanta	GA
Great Lakes Crystal Technologies	East Lansing	MI
Guided Particle Systems, Inc.	Pensacola	FL
Guidestar Optical Systems, Inc.	Longmont	СО
H. F. Webster Engineering Services, Inc.	Box Elder	SD
H. F. Webster Engineering Services, Inc.	Box Elder	SD
HARP Engineering LLC	Ann Arbor	MI
Iconic Air	Wheeling	WV
Indiana Integrated Circuits	South Bend	IN
Information Systems Laboratories, Inc.	Poway	CA
InnoSense LLC	Torrance	CA
Innovative Advanced Materials, Inc.	Hampton	GA
Intelligent Automation, Inc.	Rockville	MD
Intelligent Fiber Optic Systems Corporation	San Jose	CA
Iris Light Technologies, Inc.	Chicago	IL
Kairos Research	Fairborn	ОН
Knowledge Based Systems, Inc.	College Station	TX

FIRM	CITY	ST
Lambda Science, Inc.	Wayne	PA
Lynntech, Inc.	College Station	TX
Marc Perez	San Marcos	CA
Mesodyne	Somerville	MA
MicroSol Technologies, Inc.	Dallas	TX
MZA Associates Corporation	Albuquerque	NM
Nahsai LLC	Houston	TX
NanoSonic, Inc.	Pembroke	VA
necoTech LLC	Delaware	ОН
Non-Contact Technologies, LLC	Tullahoma	TN
Notch, Inc.	Cambridge	MA
Novaa Ltd	Dublin	ОН
O Analytics, Inc.	Fairmont	WV
OLGS, Inc.	San Francisco	СА
Omega Optics, Inc.	Austin	TX
OmniScience LLC	Fort Collins	СО
Opto-Knowledge Systems, Inc. (OKSI)	Torrance	CA
Passenger, Inc.	Austin	TX
Physical Sciences, Inc.	Andover	MA
Project OWL LLC	Brooklyn	NY
Resono Pressure Systems	Laramie	WY
Rochester Scientific, LLC	El Cerrito	СА
RPX Technologies	Ok	ОК
SA Photonics, Inc.	Los Gatos	CA
Safety Management Services, Inc.	West Jordan	UT
SciFi Innovations LLC	Chicago	IL
Semicyber, LLC	Mclean	VA
Sensatek Propulsion Technology, Inc.	Tallahassee	FL
SK Infrared LLC	Hilliard	ОН
Skylight Digital LLC	Chapel Hill	NC
Srico, Inc.	Columbus	ОН
Stellar Science Ltd Co	Albuquerque	NM
Streamline Automation, LLC	Huntsville	AL

TOPIC AWARD SELECTEES STTR PHASE II

FIRM	CITY	ST
SurfEllent LLC	Spring	TX
Toyon Research Corp.	Goleta	CA
Traclabs, Inc.	San Antonio	TX
Trek10	South Bend	IN
TriboTEX LLC	Colfax	WA
Trusted Science and Technology, Inc.	Bethesda	MD
Ultool LLC	Duluth	GA
UtopiaCompression, Corporation	Los Angeles	CA

FIRM	CITY	ST
viaForensics, LLC	Chicago	IL
Voxel Innovations	Raleigh	NC
VRC Metal Systems, LLC	Box Elder	SD
Vulcan Wireless, Inc.	Carlsbad	CA
Vy Corporation	Wayne	PA
Weaver Labs, LLC	Stillwater	ОК
X-wave Innovations, Inc.	Gaithersburg	MD
Yanhai Power Technology	Warren	ОН
ZONA Technology, Inc.	Scottsdale	AZ

TOPIC AWARD SELECTEES SBIR PHASE III

FIRM	CITY	ST
Enduvo	Peoria	IL
Genesic Semiconductor, Inc.	Dulles	VA
Hivemapper	Burlingame	CA
HTX Labs, LLC	Houston	TX
IBC Materials & Technologies	Lebanon	IN
Immersive Wisdom, Inc.	Boca Raton	FL
Physical Optics Corporation	Torrance	CA

FIRM	CITY	ST
Quantum Interface, LLC	Austin	TX
Sage Technologies, Ltd.	Warminster	PA
Second Front Systems	Arlington	VA
Street Smarts Vr	New York	NY
The Perduco Group, Inc.	Beavercreek	ОН
Vana Solutions LLC	Beavercreek	ОН
Celadyne Technologies, Inc.	San Jose	CA

